

ASSESSING EMPLOYERS' UNDERSTANDING OF
THE EMPLOYMENT PROVISIONS OF THE
AMERICANS WITH DISABILITIES ACT

By

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DEDICATION

To my husband Steve for his love, commitment and support and
for being such great Mr. Mom.

To my adviser, Mike Hirlinger, for his guidance, patience and encouragement.

To my committee members, Martin Burlingame, Jim Davis and Bill Parle for their
thoughtful insights and constructive guidance throughout this process.

To my son Reed for being the source of endless joy in my life.

To my parents Dick and Sue for their love and encouragement
in every effort I've undertaken.

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CHAPTER 1

INTRODUCTION AND BACKGROUND

Introduction

The Americans with Disabilities Act (ADA) of 1990 is the first major civil rights legislation for people with disabilities. Its purpose is to eliminate discrimination against people with disabilities with regard to access to facilities, services and employment. Although all aspects of the ADA are considered significant in establishing a clear and comprehensive prohibition of discrimination on the basis of disability” (104 Stat. 327), this study focuses on the employment provisions contained in Title I of the ADA.

The responsibility for implementation of the employment provisions of the ADA rests on all employers with fifteen or more employees. The nature of the law and the definitions within it regarding criteria for defining a “disability” and the circumstances under which the employer must provide a “reasonable accommodation” for a “qualified individual with a disability” require employers to make a significant number of decisions on a case-by-case basis. This study examines how well individuals with responsibilities for hiring employees for businesses and public entities in the state of Oklahoma understand the application of the employment provisions of the Americans with Disabilities Act.

Employment Provisions of the Americans with Disabilities Act

The employment provisions of the ADA cover virtually all aspects of employment.

The fundamental requirements of the law are as follows:

No covered entity shall discriminate against a qualified individual with a disability because of the disability of such individual in regard to job application procedures, the hiring, advancement, or discharge of employees, employee compensation, job training and other terms, conditions and privileges of employment (42 USC 12112(a)).

Discrimination includes: not making reasonable accommodations to the known physical or mental limitation of an otherwise qualified individual with a disability, who is an applicant or employee, unless such covered entity can demonstrate that the accommodation would impose an undue hardship on the operation of the business of such covered entity (42 USC 12112 (b)5(A)).

Background

Public policy regarding people with disabilities in the United States has changed significantly in the last two decades. Until the late 1970's, public policy addressed primarily medical needs and limited financial support for individuals with severe disabilities. With the enactment of the ADA, public policy now addresses employment and access to facilities and services for people with a wide range of disabilities.

The ADA is the most significant and far-reaching piece of legislation affecting people with disabilities enacted to date. It requires providing access to facilities, transportation, telecommunications, and public services to people with disabilities. In addition, it

prohibits employers from discriminating against people with disabilities in virtually all aspects of hiring and employment policies and practices solely on the basis of their disability.

The employment provisions in Title I of the ADA are complex and far reaching. The complexity relates to two factors. First, employers must make judgements regarding several key definitions in the law: (a) whether an individual has a disability, and (b) whether an individual with a disability is qualified for the position considering that reasonable accommodation is required for the qualified individual.

The application of these definitions is further complicated by several other factors. A disability may manifest itself at any time in a person's life. The impact of a disability on a person's ability to perform a job varies with each particular individual's disability and the requirements of the job which they are seeking or currently hold. In addition, the availability and cost of accommodations vary according to the nature and severity of the disability and requirements of the job under consideration. Individuals responsible for hiring and supervising employees must understand these factors in order to properly apply the law in the work place.

The employment provisions have a far-reaching impact for employers and employees and applicants with disabilities. For people with disabilities, Title I of the ADA offers possible economic, as well as the psychological and social, benefits of employment. For employers, the impact is two-edged. The ADA offers the potential for accessing a largely untapped pool of human resources. However, the legal responsibility and liability for compliance with the law creates potential financial costs and carries the risk of legal and

financial sanctions for employers determined to be out of compliance with the law.

Regulations and interpretive guidance developed by the Equal Opportunity Employment Commission (EEOC) and recommendations from legal and human resource professionals direct employers to the specific policy and procedural actions necessary for compliance with the employment provisions. Such guidelines include removal of physical barriers; revision of employment applications, job descriptions and interview procedures; posting notices of non-discrimination; and revising employment policies and procedures. Responding to these directives in the law provides a policy and procedural level of compliance.

However, actions taken or not taken by those responsible for hiring and supervising employees who interact with applicants and existing employees also determine compliance with the law. Assessing compliance necessarily must focus on how well these individuals understand and apply the law.

Statement of the Problem

Compliance with the employment provisions of the ADA requires specific knowledge and understanding of how to apply the provisions of the law in the workplace. As discussed earlier, because of the nature of the law, application of ADA provisions must be made on a case-by-case basis; therefore, the real issue in assessing employer compliance is the level of understanding of ADA employment requirement possessed by individuals in charge of hiring and supervising employees.

Objective of the Study

This study examines how well a group of individuals responsible for hiring in their businesses or public entities understand the application of the provisions of Title I of the ADA. In addition, the study analyzes the degree to which a series of employer characteristics affect their level of understanding of the law's application.

Significance of the Study

The elimination of discrimination in the employment of people with disabilities is the goal of Title I of the ADA. Measurable changes in the areas targeted by a law generally are the basis for assessing its effectiveness. Establishing the policies and procedures to be in compliance with the ADA is the first measurable change employers make. After the law has been in effect for a longer period of time, in all probability, public administrators and academicians will make comparative measurements of the number of disabled employees, their employment positions, and compensation.

However, a fundamental element in determining effectiveness of the law is how well the law is actually being applied in the workplace. A key to proper and effective implementation is the employer knowledge and the ability to expand their knowledge into understanding through application in the work environment.

Organization of the Study

There are four additional chapters in this study. The next chapter provides a selected

review of the literature related to public policy toward people with disabilities including the employment provisions of the ADA. The review includes: (a) statistical profile of individuals with disabilities in the United States, (b) statistics and studies related to the employment of people with disabilities, (c) factors affecting employers' attitudes and other people's attitudes toward people with disabilities, (d) history of American public policy toward people with disabilities, (e) major provisions of Title I of the ADA, (f) recommendations to employers regarding implementation of Title I of the ADA, and (g) current data on Title I implementation. The section also includes a description of the theoretical assumptions made in the study, followed by the theoretical framework and hypotheses to be tested in the study.

The third chapter presents the methodology for the study, including the selection of participants. It also describes the development of the research instrument to assess employers' understanding of the employment provisions of the ADA and to collect data about employer characteristics. The research instrument is a written survey containing two parts. Part I contains questions related to characteristics of the employers participating in the study. The instrument examines three types of characteristics of the employer: personal characteristics of the individual responsible for hiring (gender, age, race or ethnic background, education, and relationships with people with disabilities), organizational characteristics of the business or public entity (type of business activity, position held by the person in charge of hiring, number of employees, number of employees with disabilities hired over the previous five years); and training and resource characteristics (amount of time spent receiving training in the law and regulations by the

individual responsible for hiring and by other supervisors of the employing organization, and information and resources about the ADA and disability awareness available to the employer). Part II contains case examples requiring interpretation of the provisions of Title I of the ADA and is based on the law, regulation, interpretive guidance given to the regulations and court rulings. This section also contains a description of the procedures employed for data collection.

The fourth chapter contains the survey data, a comparative description of the results, results of the statistical tests and a summary of the findings. The final chapter presents an interpretation of the findings, discussion of the implications of the findings, directions for future study of the employment provision of the ADA and conclusions.

CHAPTER 2

REVIEW OF THE LITERATURE,

THEORETICAL FRAMEWORK, AND HYPOTHESES

Introduction

This chapter includes a review of the data and studies that describe the population of people with disabilities, the issues related to the employment of people with disabilities, the history of American public policy toward individuals with disabilities, and the major provisions of and issues related to implementation of Title I of the Americans with Disabilities Act. The theoretical assumptions made in the study are presented, as well the theoretical framework and hypotheses tested in the study.

Statistical Profile of Americans with Disabilities

There are approximately 43 million Americans in the United States who have one or more physical or mental disabilities (42USC 12101). As the population as a whole grows older, this number is expected to increase. Within that number, 44% have physical disabilities; 32% have serious health impairments including cancer, heart and respiratory disease; 13% have visual, speech and hearing impairment; 6% are mentally retarded or mentally ill; and the remaining 5% experience some other form of disabling condition (Griffin, 1991).

Statistics and Studies Related to the Employment of People with Disabilities

With regard to employment, Barlow (1991) indicates that 21 million people with disabilities are able to work although only 6 million are currently employed, less than 30%. Another study by Rothwell (1991) states that 8% of those with disabilities are employed full time, and an additional 7% are employed part time

The low level of employment is not attributed to a lack of desire on the part of individuals with disabilities to be employed. Two-thirds of the people with disabilities who are of working age would like to work (Frieden, 1992; Griffin, 1991). In addition, 82% say they would give up federal support payments if they could get a full-time job (Frieden, 1992).

Numerous studies provide insight into the status of people with disabilities. Studies conducted in the 1980s reveal lower income and education levels for adults with disabilities (West, 1991). Employed men with disabilities earned 88% of the hourly wages of nondisabled employed men in 1984, and employed women with disabilities earned 90% of the wages earned by nondisabled women (Johnson and Baldwin, 1992 (a), (b)). Although overall employment rates increased for people with disabilities from 1971 to 1984, these rates still were substantially lower than the employment rates for people without disabilities (Johnson and Baldwin, 1993:779).

Even though the Rehabilitation Act of 1973 prohibits the federal government from discriminating in employment, Lewis and Allee (1992) and Kim (1996) found that the employment of people with disabilities in the federal government has not significantly

improved since the law's enactment. Examining the impact of disability status on grade level, entry level and promotion probabilities from 1977 through 1989, these areas did not show significant gains (Lewis and Allee, 1992). Examination of data from 1988-1990 shows that federal employees with disabilities generally held lower job grades (Kim, 1996: 6) and were unlikely to be in administrative and management positions (Kim, 1996: 8).

Surveys of individuals with disabilities indicate lower participation levels in social events, and research documents that persons without disabilities hold a wide range of negative attitudes toward people with disabilities (West, 1991). Discrimination is considered widespread in both aspects of discrimination: prejudice and barriers (West, 1991).

Factors Affecting Attitudes toward the Disabled and their Employment

Mello (1995:6) theorizes that hostility is the basis for discrimination toward those covered by the Civil Rights Act; however, he argues that discrimination against people with disabilities is rooted more in ignorance. Regardless of its root cause(s), numerous studies examine the variables that affect people's attitudes toward individuals with disabilities. These variables can be divided into those associated with the personal characteristics of an individual or employer and those associated with the employing organization.

Factors Associated with Personal Characteristics of Employers

A number of studies examine various personal characteristics of employers that may affect their attitudes toward people with disabilities. Characteristics studied include gender, education level, and contact with persons with disabilities. In the studies that assessed the effects of gender on attitude toward people with disabilities, Deck (1986) and Fonosch and Schwab (1981) found that women are more likely to have favorable attitudes toward people with disabilities (Deck, 1986; Fonosch and Schwab, 1981). However, Schletzer et al. (1961) found no difference between the attitudes of men and women toward hiring people with disabilities (Schletzer et.al. 1961).

In analyzing, the impact of the level of education of the personnel manager's receptivity to employing people with disabilities, higher levels of formal education had a positive relationship to receptivity to employment in three studies (Gade and Toutges, 1983; Phelps, 1965 Schletzer et al. 1961). One study found a negative relationship between the level of education and receptivity (Bolanovich and Rasmussen, 1968) while another study found no difference in attitude based on levels of education (Hartlage, 1965).

The type of contact employers have had with people with disabilities also may have an effect on their attitudes toward employing people with disabilities. Antonak (1981) found that the intensity of contact with individuals with disabilities accounted for variations in attitudes toward the disabled. Individuals having a relative, friend or close acquaintance with a disability are more likely to have positive attitudes toward

employment of people with disabilities. Another study found that those who had worked with disabled people are more receptive to hiring people with disabilities (Holmes and McWilliams, 1961).

Factors Associated with the Employing Organization

Factors associated with the employing organization also may affect the attitudes of an employer toward employing people who have disabilities. Studies have analyzed the following factors: (a) the size of the employing organization as measured by number of employees and, (b) the type of business conducted.

Numerous studies focus on the differences in size of the employer as a characteristic effecting differences in attitudes toward employing the disabled. Eleven studies on the effects of employer size show that larger businesses, those employing more than 50 people, are more likely to favor employing people with disabilities (Barshop, 1959; Bolanovich and Rasmussen, 1968); Gade and Toutges, 1983; Grace, 1970, Hamilton and Roesner, 1972; Harris and Associates, 1987; Hartlage, 1965, Hartlage, 1966; Phelps, 1965; Reeder, 1958 and Zadny, 1980). However, Olshanky (1958) found smaller employers to be more favorable, and eight studies found no difference in attitude between small and large companies (Bieliauskas and Wolfe, 1961; Colbert et al., 1973; Emener and McHargue, 1978; Loeb et al, 1970; Reeder and Donahue, 1958; Schletzer et al, 1961; Williams, 1972; Wolfe, 1981).

The type of business conducted by the employing organization is another factor that may have a relationship with the employer's attitude toward employing people with

disabilities. The findings of previous studies is not conclusive. Some research shows that employers in manufacturing firms have a more favorable attitude toward the employment of people with disabilities than those in non-manufacturing companies (Grace, 1970; Harris and Associates, 1987; Hartlage, 1965; Hartlage, 1966; Olshanky, 1958). However, other studies have reported either mixed results or no differences (Bolanovich and Rasmussen, 1968; Gade and Toutges, 1983 Phelps, 1965; Reeder and Donahue, 1958; Schletzer et al. 1961).

Public Policy Regarding Americans with Disabilities

Public policy regarding individuals with disabilities in America has evolved from one that promotes segregation and dependence, to one that, with the enactment of the Americans with Disabilities Act of 1990, promotes integration and independence and recognizes individual ability (West, 1991). As with most public policy, this evolution is partly a reflection of the change in knowledge and understanding. It is also a response to a movement representing a group of citizens seeking to alleviate discrimination.

Legislation Regarding the Disabled Preceding the Americans with Disabilities Act

Legislation to provide educational and medical services for disabled veterans during and after World War I marks the first government efforts to address the needs of Americans with disabilities (Reed, 1992). Prior to that time, charitable, church, and a few publicly sponsored institutions existed to house individuals with disabilities whose families could not or would not care for them. The first legislation calling for vocational

training of civilians with disabilities was the Smith-Fess Act of 1920 (Reed, 1992).

Gradual expansion of medical, rehabilitation, and educational services continued, however, with the emphasis during the late 1960's shifting away from entitlement programs, such as Social Security Supplemental Income (SSI), to a focus on civil rights. The Architectural Barriers Act of 1968 requires access to federally funded public buildings (Fersh and Thomas, 1993). The passage of the Rehabilitation Act of 1973 extends civil rights to the disabled through establishment of prohibitions against discrimination by the federal government and those entities receiving federal funds (Reed, 1992).

Other federal legislation provides services to people with disabilities, including Medicare and Medicaid which provides medical rehabilitation and services to many people with disabilities (Reed, 1992). The Education for All Handicapped Children Act, now called the Individual with Disabilities Education Act (IDEA), was enacted in 1975 and requires that all children with disabilities receive a public education (Reed, 1992). However, until the passage of the Americans with Disabilities Act of 1990, all legislation dealing with individuals with disabilities dealt with a limited portion of the population of Americans with disabilities.

Civil Rights Legislation

Other major civil rights legislation that extends protection against discrimination based on race, color, religion sex, or national origin, including the Civil Rights Act of 1964 and the Fair Housing Amendments of 1968, does not include people with

disabilities but did serve as model for the Americans with Disabilities Act (Reed, 1992).

There is, however, a major difference between groups covered under the Civil Rights Act and Fair Housing Amendments and people with disabilities. The widespread existence of physical barriers make structural and service accommodations necessary in order for people with disabilities to have access to activities covered under most civil rights laws. Civil rights protection for people with disabilities is distinctively different from other minority groups for this reason.

Development of the Americans with Disabilities Act of 1990

The original proposal for the Americans with Disabilities Act was made by the National Council on Disability in its 1986 report to Congress and the President (Jones, 1991). In 1988, the Council's report, On the Threshold of Independence included a draft of the legislation. Also in 1988, legislation of this type was recommended in the report of the Presidential Commission on the Human Immunodeficiency Virus (HIV) Epidemic (Jones, 1991). Political observers consider the convergence of efforts by these two groups a significant factor in the ultimate passage of the ADA in 1990.

While business opposition was strong to many provisions of the ADA, particularly the requirement of reasonable accommodation that business owners believed was unfair because it requires them to incur the cost of such accommodations, the legislation enjoyed strong bi-partisan support throughout its legislative history (Griffin, 1991). This was particularly significant in light of the fact that this was the first civil rights legislation that placed an affirmative obligation on the employer to provide accommodations under

certain specifications.

Major Provisions Contained in Title I of the Americans with Disabilities Act

The heart of the requirement in Title I is an equal-opportunity-employment mandate which states:

No covered entity shall discriminate against a qualified individual with a disability because of the disability of such individual in regard to job application procedures, the hiring, advancement, or discharge of employees, employee compensation, job training and other terms, conditions and privileges of employment. (42 USC 21112(a)).

Discrimination includes: not making reasonable accommodations to the known physical or mental limitations of an otherwise qualified individual with a disability who is an applicant or employee, unless such covered entity can demonstrate that the accommodation would impose an undue hardship on the operation of the business of such covered entity (42 USC 12112(b)(5)(A)).

Virtually all aspects of employment are covered under the ADA; however, the law does not guarantee employment, nor does it require preferences or establish quotas (Shaller and Rosen, 1991-92).

Entities Covered by Title I of the ADA

Covered entities include all businesses with 15 or more employees and includes employment agencies, labor organizations, and joint labor-management committees.

Private membership organizations other than labor organizations that are exempt from section 501C of the Internal Revenue Code of 1986 are not covered (42 USC 12111(5)(B)(ii)).

Enforcement and Remedies Under the ADA

The Equal Employment Opportunity Commission (EEOC) has the responsibility of enforcing Title I of the ADA. The Commission promulgated regulations as well as established procedures for filing and resolving cases where violations of the provisions of Title I are alleged. In addition, the same court remedies are available under Title I of the ADA as those available under the Civil Rights Act of 1964 (42 USC 12117(a)). These include compensatory damages and punitive damages, as well as the right to a jury trial. Caps on damages are based on the size of the employer (U.S. Department of Justice, 1996).

Definitions

In order to adequately comprehend the employment provisions of the ADA, an understanding of the definition and interpretation of five key terms is essential: disability, qualified individual with a disability, essential functions, reasonable accommodation, and undue hardship. A summary of the statutory definition and regulatory guidelines follows.

Disability. A person has a disability if he or she: (a) has a physical or mental impairment that substantially limits one or more life activities, (b) has had such an

impairment in the past, or (c) is regarded as having such an impairment (42 USC 12102(2)). EEOC defines “major life activities” to include such functions as caring for oneself, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, working, sitting, standing, lifting, reaching, thinking, concentrating, and interacting with others (Coil and Shapiro, 1996: 6).

While the Act provides no exhaustive list, it does provide exclusions from the definition: homosexuality, bisexuality, compulsive gambling, kleptomania, pyromania, transsexualism, exhibitionism, and pedophilia (Kohl and Greenlaw, 1992). In addition, EEOC has identified the following conditions that do not, in and of themselves, constitute an impairment: environmental, cultural and economic disadvantages; age; pregnancy; physical characteristics; and common personality traits and normal deviations in weight, height or strength (Coil and Shapiro, 1996).

Obesity is not, in and of itself, an impairment. However, EEOC does consider “morbid” obesity--defined as having twice the optimal weight for one’s height--to be a disability (Coil and Rice, 1994:503; Coil and Shapiro, 1996). Also, obesity resulting from a physiological condition is considered an impairment (Coil and Shapiro, 1996).

Alcoholism and drug addiction are impairments under the ADA, although current use of illegal drugs is excluded (Coil and Shapiro, 1996). In addition, people addicted to prescription drugs may have a disability (Coil and Shapiro, 1996). Alcoholics and drug addicts who have completed rehabilitation and are no longer using alcohol or drugs and those who are undergoing rehabilitation are also covered under the law.

Both the EEOC and the courts consider a contagious disease to be a disability (Coil

and Shapiro, 1996). Conditions lasting only a few days or weeks and having no long-term effect do not constitute substantially limiting disabilities. (Coil and Shapiro, 1996:8).

Qualified Individual with a Disability. A “qualified individual with a disability” is an individual who, with or without “reasonable accommodation,” can perform the essential functions of the employment position that such individual holds or desires (42USC12111(8)). The employers’ judgment is given consideration in the determination of essential functions of a job, evidence of which is considered to be a written job description (42USC12111(8)). A two-step analysis is utilized to determine whether an individual is qualified (Barlow and Hane, 1992). Step one is the determination that the individual possesses the necessary prerequisites for the position: education, experience, skills, or licenses. Step two is the determination that the individual can perform the “essential functions” with or without “reasonable accommodation.”

Essential Functions. Central to determining if the individual with a disability is qualified is the identification of “essential functions” of the job and the determination of whether the individual possesses the skills necessary to perform those functions. Essential functions are functions considered essential to the performance of the job and include activities the employee actually has to perform in the job (Gordon, 1992), the amount of time spent on the function (Barlow, 1991; Greenlaw and Kohl, 1992), consequences of not performing the function (Barlow, 1991; Gordon, 1992; Greenlaw and Kohl, 1992), work experience of current or past incumbents (Barlow, 1991; Greenlaw and Kohl, 1992), and terms of collective bargaining agreements (Barlow, 1992; Greenlaw and Kohl, 1992).

In addition, essential functions are based on the employers' judgment and on the written job description (Barlow, 1992; Gordon, 1992; Greenlaw and Kohl, 1992). Descriptions of essential functions in job descriptions should state the activities, the amount of time expected to be spent on each activity, the end results of the activity, as well as the measurements to determine if the activity has been performed (Meng, 1991(b)).

The courts have ruled that regular and dependable attendance may constitute an essential function of a job (Coil and Shapiro, 1996:9). However, the issue of whether disability-related absenteeism may disqualify a person from a job must be determined on a case-by-case basis (Coil and Shapiro, 1996:9). Also, an individual whose disability completely precludes the person from working in any job cannot be considered a qualified individual with a disability under the ADA (Coil and Shapiro, 1996:10).

Reasonable Accommodation. The proper determination of a "reasonable accommodation" is a fundamental consideration in determining whether a qualified individual with a disability can perform the essential functions of a job. A critical aspect in determining whether an accommodation is "reasonable" is whether the accommodation places an "undue hardship" upon the employer.

No aspect of the employment provisions has received greater attention with regard to regulatory or interpretive guidance than has the reasonable accommodation proviso. Since the criteria for determination of reasonable accommodation and undue hardship are specific to the individual applicant or employee with a disability, the essential functions of the job under consideration, and the characteristics of the employer, the actual

determination of the applications of the law, will, of necessity, be made on a case-by-case basis.

“Reasonable accommodation” provisions cover three aspects of employment: (a) accommodation or modification in the job application process, (b) accommodation or modification of the work environment in order for the individual to perform the essential functions of the job, and (c) modification or adjustment that enables the employee with a disability to enjoy the benefits and privileges of employment (Greenlaw and Kohl, 1992; Barlow, 1992; Gordon, 1992).

The types of accommodation include: (a) the removal of physical barriers in order to establish access, (b) provision of auxiliary aids, and (c) development of flexible scheduling and structuring of jobs (Gordon, 1992). Specific examples of accommodation may include: job restructuring, provision of personal assistants, qualified readers or interpreters, provision of equipment and assistive devices, reassignment to vacant positions, and part-time or modified schedules (Shaller and Rosen, 1991-92; Shaller, 1991; Feldblum 1991). Accommodation may also involve the provision of additional unpaid leave (Susser, 1990).

In order for the accommodation provisions to be applicable, the applicant or employee must: (a) be eligible and be able to perform the essential functions, (b) inform the employer of the existence of a disability, and (c) request the accommodation (Gordon, 1992). Although initial EEOC guidelines prohibited any discussion of reasonable accommodation until a job offer is made, revised guidelines allow some inquiry into the reasonable accommodation needed to complete the hiring process, as well

as reasonable accommodation that may be necessary to perform the job (Coil and Shapiro, 1996:21).

The process for determining a reasonable accommodation is to analyze each job, individually consult with the applicant or employee with a disability regarding potential accommodation, and consider the preference of the individual with a disability in the determination of the accommodation (Barlow and Hane,1992; Greenlaw and Kohl,1992). However, the accommodation does not necessarily have to be the “best” accommodation available (Greenlaw and Kohl,1992).

The court has ruled that an employer may question the need for an accommodation and does not have to provide an accommodation of the employee’s choice (Coil and Shapiro, 1996:14). The accommodation must be effective in that it enables the person to perform the essential functions of the job (Coil and Shapiro, 1996:14).

This does not mean that employers must create jobs, give preferences, or provide “shadow” employees to perform the majority of the essential functions of the job for the person with disabilities (Shaller,1991). Employers cannot, however, select a qualified person without a disability over an equally qualified individual with a disability who can perform the essential functions of the job with reasonable accommodation solely on the basis on the disabled person’s disability (Greenlaw and Kohl,1992).

The EEOC regulations indicate that leave may be considered a form of accommodation; however, it does not specify the amount of leave (Coil and Shapiro, 1996:14). The courts have ruled that a flexible or open-ended work schedule may be an accommodation when disability-related leave occurs periodically and is unpredictable

(Coil and Shapiro, 1996:15).

Undue Hardship. Reasonable accommodation is required unless it would create an “undue hardship” on the employer. There is no “bright-line” test for determining whether an accommodation creates an undue hardship (Gordon,1992). The general criteria for determining the impact of the accommodation upon the employer are: (a) overall size of the business in proportion to the number of employees, (b) the number and type of facilities, (c) the overall finances of the company, and (d) the nature and cost of the accommodation (Griffin, 1991; Susser,1990).

The courts have ruled that a cost-benefit analysis may be used by employers to determine if the cost of an accommodation is reasonable compared to the benefit derived from it (Coil and Shapiro, 1996:17).

However, financial considerations are not the only basis for determining if an accommodation is reasonable. The effect on the operations of the business, including whether it disrupts other workers or the production process, may also be a consideration (Postol and Kadue,1991). Before employers legally can reject an accommodation on grounds that its cost poses undue hardship on their businesses, they must investigate the possibility of finding funding sources from the private or public sector, including allowing the applicant or employee to pay all or part of the cost of the accommodation (Greenlaw and Kohl, 1992; Shaller and Rosen, 1991-1992).

It is important to note definitions of several other specific provisions of Title I:

Qualification Standards, Tests, and Other Selection Criteria. Qualification standards,

tests, and other selection criteria may not screen out people with disabilities (Sussex, 1990:163; Feldblum, 1991:91). They also may not have a disparate impact on individuals with disabilities unless the standard, test, or criteria is job-related and a business necessity (Shaller and Rosen, 1991-92: 420; Greenlaw and Kohl, 1992:413). This does not prohibit an employer from establishing job-related qualification standards that include education, skills, work experience, and physical and mental standards necessary for job performance (Barlow and Hane, 1992:55-56).

Direct Threat to Health; Significant Risk of Substantial Harm. Employers have the right to require that an individual not pose a “direct threat to the health or safety of others,” which means a threat posing a “significant risk of substantial harm” to the health or safety of the individual that cannot be eliminated or reduced by reasonable accommodation (Frierson, 1992:604; Boller and Massengill, 1992; 288). While an employer may determine that employing a person with a disability poses a significant risk to the health and safety of others, an employer may not make this determination for the individual with a disability regarding the risk to self (Postol and Kadue, 1991:330).

Medical Inquiries and Examinations. Medical inquiries and examinations are prohibited prior to an offer of employment and may be required only after there is a conditional offer of employment. Medical inquiries and examinations following a conditional offer of employment may be required only if it applies to all applicants, not only the applicant with a disability (Gordon, 1992:188-89; Feldblum, 1992:97; Shaller and Rosen, 1992-92:421-22; Postol and Kadue, 1991:325). For purposes of this Act, drug

testing is not considered a medical examination (42 USC 12114(d) (1)).

Recommendations to Employers Regarding Implementation of Title I

Human resource and legal professionals advise employers to develop a comprehensive strategy for implementation of the requirements of Title I of the ADA. The first step is to review of all policies, procedures, instruments, and requirements related to the employment process. Next, employers should designate a company representative to oversee compliance. (Mullins, Rumrill and Roessler, 1994).

Compliance through Policies and Procedures

When conducting the review of all job descriptions, employers should focus on the clarity in identifying the essential functions of each job (Boller and Massengill, 1992; Esposito, 1992; Gordon, 1992; Lotito and Soltis, 1991; Postol and Kadue, 1991; Shaller, 1991; Perry, 1994). Solicitation of suggestions from applicants and employees with disabilities may be helpful (Gordon, 1992). The employer should complete the review and revision of all job descriptions prior to advertising and interviewing for positions (Gordon, 1992).

Additionally, employers should review all forms, tests, and interview procedures to determine if they screen out or eliminate individuals with disabilities and to make certain they focus on the applicant's qualifications to perform the essential functions of the job (Soltis, 1994). The hiring company should remove all references to status of health or disabilities (Perry 1994), and all questions should focus on the individual's ability to

perform the essential functions of the job (Postol and Kadue, 1991; Soltis, 1994).

Concerning pre-employment medical examinations, the employer should ensure that the exams are in place to measure job-related health considerations (Esposito, 1992; Waterman, 1992) and that they are administered only after a conditional offer of employment has been made (Perry, 1994; Soltis, 1994). Companies may test job applicants for illegal drugs (Frierson, 1992).

Employers should also focus on their advertising messages and facilities access for ADA compliance. They should make sure their job advertisements do not discourage individuals with disabilities from applying (Soltis, 1994) and that applicants who are disabled have no physical barrier prohibiting their access to the application process. (Shaller, 1991-92; Waterman, 1992; Soltis, 1994). Job advertisements should state that work locations are accessible to individuals with disabilities (Soltis, 1994).

Employers must post notices of individual rights under the ADA in places accessible to applicants and employees (Frierson, 1992). In addition, all written company materials such as policies, forms, and personnel handbooks, should include a notice of nondiscrimination based on disability (Frierson, 1992).

Employers are also advised not to contract with vendors, subcontractors, or independent contractors who discriminate against individuals with disabilities who are applicants or employees of the employer (Frierson, 1992; Perry, 1994). The ADA also requires all third-party contractors, including employment agencies, to comply with the ADA (Kaplan, 1993).

Compliance at the Management Level

To adequately comply with ADA regulations, the management of companies and organizations covered by the ADA should require training in the proper methods of evaluating individuals with disabilities regarding disabled applicants' qualifications and abilities to perform the essential functions of a job (Shaller, 1991; Waterman, 1992). In addition, the training should include ways to analyze reasonable accommodation (Soltis, 1994; Waterman, 1992). Frierson (1992) recommends that companies designate an individual or limited group of individuals to make the final decision regarding accommodation for applicants and employees (Frierson, 1992).

Employers should train supervisors in ADA requirements in order to determine whether an employee experiencing difficulty performing a job is, in fact, disabled. This training should include ways to deal with situations in which an employee informs the supervisor of a disability and the appropriate actions to take to determine reasonable accommodation (Perkins, 1991).

Employers should also provide broad training regarding compliance with the ADA and disabilities awareness to employees not directly involved in the hiring process. (Esposito, 1992; Frierson, 1992; Fersh and Thomas, 1993:12; Hodge and Crampton, 1993; Mullins, Rumrill and Roessler, 1994).

The review for ADA compliance should also include the administration of performance evaluations, wage increases, promotional opportunities, employee benefits (including insurance and workers' compensation) to ensure that there is no discrimination

against qualified individuals with disabilities (Soltis, 1994).

Human resource practitioners and legal experts also encourage employers to locate available resources where they can learn about people with disabilities. These professionals' recommendations include resources to provide information on technology (Breuer, 1993), the President's Committee on the Employment of People with Disabilities, and the Job Accommodation Network, as well as personnel management associations that may maintain referral services (Breuer, 1994). Employers are also advised to learn about certain disabilities from disability-specific information and advocacy organizations (Breuer, 1994).

In addition to specific actions to implement and demonstrate compliance with Title I, employers should keep accurate records and use group decision-making for decisions regarding discipline, termination, denial, promotions, or benefits, as well as career path changes (Guerri, 1996).

Employers should also consider developing a cost analysis to assess the cost of accommodating an applicant (Hollwitz, Goodman, Bolte, 1995). In this approach, a decision rule is developed that places a value on all essential functions of the job the applicant with a disability cannot perform. If the value exceeds an established percentage of the annual salary for the position, then the accommodation is judged unreasonable. An alternative method applies a price ceiling with respect to a company's overall human resources budget.

Recommendations by Boller and Messengill (1992) advise employers to avoid having any blanket policies regarding applicants or employees with disabilities in favor of

treating people individually. Employers should also keep written records and document events surrounding employment decisions, including all attempts to accommodate individuals with disabilities (Lotito and Soltis, 1991; Postol and Kadue, 1991; Esposito, 1992; Mullins, Rumrill, and Roessler, 1994).

Current Data Related to Effects of the Employment Provisions of the Americans with Disabilities Act

It is too early to determine the impact of the employment provisions regarding increasing the employment of people with disabilities. However, examination of the data profiling the complaints filed with the ADA enforcement agency, the Equal Employment Opportunity Commission, provides some information regarding the effects of Title I thus far.

Data from the Equal Employment Opportunity Commission (EEOC)

The percentage of complaints received by the EEOC alleging discrimination in hiring is 9.9% (EEOC, 1996) which is slightly higher than the 9% of complaints alleging hiring discrimination under other laws enforced by the EEOC (Coil and Rice, 1994:494).

Settlements of ADA cases have averaged \$14,000, nearly \$4,000 higher than other cases alleging discrimination under the other laws enforced by EEOC (Silverstein, 1993:7). It is not known at this time whether this data suggests greater discrimination in the hiring of individuals with disabilities than discrimination based on age, gender, and race or whether it is a result of a higher level of awareness of the law by the effected parties or

other factors.

In the period from July 26, 1992, the effective date of the first provisions, through June 30, 1996, a total of 68,203 complaints were filed with EEOC (EEOC, 1996). That agency determined that 45% of the cases had no reasonable cause and closed 40% for administrative reasons (EEOC, 1996). The remaining 15% of the cases resulted in merit resolution, meaning a case with an outcome favorable to the charging party or one with meritorious allegations (EEOC, 1996).

The types of impairments cited by complainants were back impairments, 18.4%; emotional or psychiatric impairments, 12.6%; neurological impairments, 11.3%; and extremities, 8%, with the remainder divided among numerous other categories (EEOC; 1996). The major types of violations cited were discharge, 51.8%; failure to provide reasonable accommodation, 27.9%; harassment, 11.8%; and hiring, 9.9%. One analysis of the data indicates that there is no relationship between type of claim and type of disability (Verespej:1994). Close to 80% of the claims were from current employees. In cases that were settled voluntarily, employers have lost two-thirds of the cases (Verespej, 1994:61).

Data Regarding the Cost of Accommodation

Data has also been collected regarding the cost of accommodation. The Job Accommodation Network sponsored by the President's Committee on the Employment of People with Disabilities reports for every dollar spent on accommodation, companies received \$15.34 in benefit. (Job Accommodation Network, 1994). One study based on the experience of Sears, Roebuck and Company indicates the average cost of

accommodation provided to its employees to be \$121 (National Council on Disability, 1995). The same study showed 69% of the accommodations cost nothing, 28% cost less than \$1,000, and only 3% exceeded \$1,000 (National Council on Disability, 1995). Another study indicates that two-thirds of all accommodations cost less than \$500 and that half cost less than \$50 (Mello, 1995: 5).

Theoretical Assumptions of the Study

This research is based on three theoretical assumptions about discrimination in the employment of people with disabilities and the implementation of the employment provisions of the ADA.

First, discrimination against people with disabilities in employment situations is based primarily on ignorance. In order to decrease or remove discrimination, people must become more knowledgeable about disabilities and the abilities of people with disabilities to work including understanding the employment provisions of the ADA.

Second, understanding the employment provisions of the ADA is based on knowledge of the specific requirements but encompasses more than the ability to iterate the wording. It includes a demonstrated ability to apply the provisions by taking appropriate action with applicants and employees in the workplace.

Third, measurement of employers' ability to identify the appropriate actions to take in the workplace can best be accomplished through the use of case examples. The construction of case examples that describe circumstances in which knowledge of the ADA must be applied provides a tangible measure of the employers' understanding of the

employment provisions of the ADA.

Theoretical Framework of the Study and Hypotheses To Be Tested

The ignorance which forms the basis for discrimination against people with disabilities is not eliminated simply by the passage of the ADA. The inverse of ignorance, that is knowledge and understanding of disabilities and the ADA, will increase due to its enactment, although the amount of increase that is likely to occur in a seven year period--from passage in 1990 to the present--is relatively small. In addition, characteristics of employers which relate to empathy toward people with disabilities and knowledge about disabilities and employment will likely cause differences in the level of understanding achieved in this period of time.

Therefore:

H₁ The majority of employers will be able to correctly identify whether the actions of an employer are in compliance or out of compliance in less than 50% of the case examples presented.

Personal Characteristics of Employers

Two of the four studies reviewed (Deck, 1986; Fonosch and Schwab; 1981) found female employers to be more receptive to the employment of people with disabilities. It is expected that females, as well as individuals who are members of racial or ethnic minorities, will be more empathetic toward hiring people with disabilities as a result of their own experiences of discrimination. Similarly, older employers are anticipated to be

more empathetic toward the hiring of people with disabilities since the incidence of disabilities increases with age. Thus:

H₂ It is expected that female employers will demonstrate better understanding of the ADA than male employers.

H₃ Employers who are older will demonstrate better understanding of the ADA than employers who are younger.

H₄ Employers who are members of racial or ethnic minorities will demonstrate better understanding of the ADA than those who are not.

Three of the five studies related to the levels of education of employers and receptivity to employing people with disabilities found that higher levels of formal education were positively related to receptivity to employing people with disabilities (Gade and Toutges, 1983; Phelps, 1965; Schletzer et al., 1961). More years of formal education tends to increase general knowledge, as well as awareness of diversity among people.

H₅ Employers who have completed more years of formal education will demonstrate better understanding of the ADA than employers with fewer years of formal education.

Also, those who majored in fields that prepare people to work in professional positions responsible for supervision or management of employees (i.e., human resources, personnel management, and counseling) should be more knowledgeable about people with disabilities due to their education and more empathetic due to their choice of major field of study. These individuals are also more likely to have learned about all

employment laws related to discrimination, including the ADA. Thus:

H₆ Employers whose major field of study is in a human resource-related field will demonstrate better understanding of the employment provisions of the ADA.

Two studies found a positive relationship between those who had personal relationships with people with disabilities and their attitudes toward employment of people with disabilities (Antonak, 1981; Holmes and McWilliams, 1961). It is expected that employers who have a family member, friend or neighbor, or colleague or co-worker with a disability will be more empathetic and, therefore, have greater understanding of the ADA. In addition, employers who themselves have a disability should have a better understanding of the ADA because of its direct impact on their own employment and their lives.

H₇ Employers who have a family member, friend or neighbor, co-worker or colleague with a disability or themselves have a disability will demonstrate better understanding of the employment provisions of the ADA.

The majority of studies related to the size of the employer and attitudes toward employing people with disabilities found that employers with a larger number of employees were more favorable toward the employment of people with disabilities (Barshop, 1959; Bolanovich and Rasmussen, 1968; Gade and Toutges, 1983; Grace, 1970; Hamilton and Roesner, 1972; Harris and Associates, 1987; Hartlage, 1966; Phelps, 1965; Reeder, 1958; and Zadny, 1980).

Organizational Characteristics

It is expected that companies with larger numbers of employees will have a better understanding of the ADA for several reasons. Larger companies are more likely to have the resources to provide training for those in charge of hiring and supervision of employees. Therefore their managers and supervisors should be more have more knowledge of the ADA. In addition to having more knowledgeable managers and supervisors, companies with a large number of employees are more likely to have a variety of jobs within their company, a fact that increases the possibility that they have positions for which an individual with disability is qualified. Also, large companies typically have more resources to provide accommodations for employees with disabilities.

H₈ Employers within entities with a larger number of employees will demonstrate better understanding of the ADA.

Employers with companies that have a higher rate of hiring people with disabilities are expected to have more understanding of the ADA. It is presumed that employers who have hired people with disabilities either had a better understanding, which led to hiring more individuals with disabilities, or that they acquired familiarity with the ADA after hiring people with disabilities or have had employees who have become disabled subsequent to their initial hiring.

H₉ Employers with entities that have a higher hiring rate of employees with disabilities will demonstrate better understanding of the ADA.

Studies are not conclusive with regard to whether the type of business a company is engaged in affects an employer's attitude toward hiring people with disabilities. It is expected that employers or entities in the field of education will have a better understanding than other types of businesses because they should be more knowledgeable of the requirements of the ADA. Most public entities have been covered under the Rehabilitation Act of 1973 for over twenty years. Because the provisions of the Rehabilitation Act are virtually the same as the ADA, these public schools and universities should have a better understanding of the application of the law than other types of organizations.

H₁₀ Employers who work for education entities will demonstrate better understanding of the ADA than employers with work entities engaged in other types of activity.

Companies that have a human resource or personnel director or manager as the person responsible for hiring have an individual whose sole or primary responsibility is dealing with personnel issues. That responsibility generally involves familiarity with all federal, state, and local law governing employment. An individual who is able to focus on these issues should have more knowledge of the ADA due to having the opportunity to obtain more training. This person is also more likely to be the person that has the responsibility for compliance and implementation of the employment provisions of the ADA.

H₁₁ Companies employing individuals whose sole or primary responsibility is to serve as the human resource or personnel director will demonstrate better understanding of the ADA.

Training and Resource Characteristics

Due to the complex and comprehensive nature of the law, the amount of time those responsible for hiring spend acquiring training and information about the ADA should improve their understanding of the ADA. Individuals are not likely to become familiar with this law without considerable time and effort spent reading, studying, and learning about the ADA. Likewise, supervisors and managers not directly responsible for the hiring process or compliance with the ADA need to spend time receiving training and information about the ADA in order to understand its provisions. Because of the complexity of the law, variety of types of information resources are needed on the law and on disabilities awareness.

H₁₂ Employers who have completed more hours of training about the ADA will demonstrate better understanding of the ADA than companies employing individuals with fewer hours of training.

H₁₃ Employers within companies with supervisors or managers who have completed more hours of training about the ADA will demonstrate better understanding of the ADA.

H₁₄ Employers with more types of resources on the ADA available to them will demonstrate better understanding of the ADA than those with fewer resources.

H₁₅ Employers with more types of resources available to them on disabilities awareness will demonstrate better understanding of the ADA.

Summary

The primary purpose of this study is to assess the level of understanding that employers have regarding the application of the employment provisions of the ADA. Demonstrated understanding of the application of the employment provisions will be measured by developing an instrument that contains case examples of situations that occur in work settings. It is expected that many employers will have a moderate level of understanding as measured by the percentage of responses that correctly identify the actions of the employer in the case as being in compliance or out of compliance with the ADA.

In order to explore factors that may explain why some employers have more understanding of the application of the ADA than others, three groups of characteristics--personal characteristics of the employer, characteristics of employing organizations, and characteristics related to the training and information resources --will be examined to determine their effect on employers' level of understanding.

CHAPTER 3

METHODOLOGY

Overview

The basis for this study is a survey developed to assess how well employers understand Title I of the ADA through application in workplace situations and factors that may have an effect on their level of understanding. Sent to individuals responsible for hiring employees in entities covered under the law for member organizations of the Oklahoma State Chamber of Commerce, the survey has two parts.

The first part contains questions about employer characteristics: personal characteristics of the individual completing the survey, organizational characteristics of the entity that employs the individual, and training and resource characteristics of the individual and employing entity. The second part of the survey contains case examples of employer decisions in employment situations with circumstances pertinent to issues covered by the ADA.

Selection of Participants

The survey participants, composed of Oklahoma State Chamber of Commerce member entities, are a diverse group of employers. The Oklahoma State Chamber of Commerce has a broad statewide membership of private sector enterprises, as well as public sector entities, including cities, schools, universities, and government agencies.

Located throughout the state, the member organizations have employee populations that vary from 10,000 to 3.

The State Chamber of Commerce provided a list of member organizations employing 15 or more people. The employment provisions of the ADA do not apply to entities that have fewer than 15 employees.

The list contained a “key contact” for 889 member organizations, rather than the name of a human resource or personnel manager or director, since State Chamber membership data does not include that information. The “key contact” is the individual identified as the primary contact for communication with the State Chamber and is generally the president/chief executive officer or a senior level officer of the company or business.

Each key contact on the list received a letter that included an explanation of the purpose and topic of the survey and a request for the name of the individual responsible for hiring for the company, who would then be sent the survey (Appendix A). A stamped return postcard for submission of the name of the individual responsible for hiring was included with the letter.

Two mailings were sent to the key contacts, resulting in 390 organizations (44% of those contacted) returning the postcard with the name and mailing address of the person responsible for hiring for their company. The individuals whose names were submitted on the return postcards form the population for the study.

Research Design

In order to measure employers' understanding of the employment provisions of the ADA as demonstrated through application in the workplace, this study uses a case scenario or example approach. Initially, 24 case examples were developed.

The interpretive guidance provided in the regulations (U.S. EEOC and U.S. Department of Justice, 1992) formed the basis for the development of the examples. The examples describe situations in which employers made employment or personnel decisions related to major issues covered by the employment provisions of the ADA. Each presents a situation applicable to most employers and focuses on the fundamental requirements of the law. By design, the survey avoids areas of the law that have proven to be difficult to interpret or in which there is an absence or inconclusive interpretation of the law, either by the regulations or court rulings. Also by design, questions give respondents a set of issues that are unambiguous with regard to the law. The underlying basis for the construct of the scenario is to present circumstances in which the employer's decision was clearly one in compliance or non-compliance.

Next, a panel of experts reviewed the scenarios for validation. The six-member panel consisted of two professionals in the area of disabilities policy who have disabilities themselves, an affirmative action officer for a university who previously was employed by EEOC, one human resource director, and two lawyers with expertise in the employment provisions of the ADA (Appendix B). The panel reviewed both the content of the case examples, as well as validated the responses for each example. The panel's

comments resulted in removal of four cases from the survey.

Of the 20 remaining cases in the survey, two cases were modified in order to expand the response choices. One case was modified so that it does not provide enough information to determine compliance and another was modified in such a way that the requirements of the ADA are not clear regarding the issues related to the case. Eighteen (18) are cases clearly in compliance or out of compliance. This modification limits the possibility that respondents could get a high percentage of correct answers due to 50% probability of a correct answer with only two answer choices. This revision created four response categories: (a) case does not provide enough information to determine compliance and (b) the requirements of the ADA are not clear regarding issues raised in the case.

The survey also addresses factors that might affect employers' understanding of the application of the employment provisions of the ADA with a series of questions. The factors include personal characteristics of the individual completing the survey, organizational characteristics of the employing organization, and information resources and training available to the individual completing the survey. A list of questions covering these areas was also developed.

A group of six individuals responsible for hiring in their companies pre-tested the survey. The results of the pre-test and comments from the participants did not indicate a need for any substantive changes in the survey.

Research Instrument

The survey instrument has two parts (Appendix C). Part I of the survey contains questions regarding background information on the individual completing the survey and the company that employed them (employer characteristics). Part II contains the case scenarios regarding employment decision-making.

Questions contained in Part I cover three areas: (a) personal characteristics of the individual completing the survey, (b) characteristics of the company for which the individual completing the survey was employed and, (c) information about the amount of training received and types of resources available to the individual completing the survey to acquire information about the employment provisions of the ADA.

The questions about personal characteristics of the individual completing the survey include gender, race, age, number of years of education completed and major field(s) of study. These questions also include whether the individual has a family member, friend or neighbor, and/or co-worker with a disability and whether the individual him- or herself has a disability.

Questions pertaining to organizational characteristics of the business or entity for which the respondent is employed include: estimate of total number of employees, estimate of number of individuals with disabilities employed by the business or entity over the previous five years, type of business (manufacturing, sales, service or other), and the type of position (human resources or personnel director/manager, manager with human resource or personnel responsibilities, or another position) which the individual

completing the survey held within the business.

Information about training and resources include questions pertaining to the amount of time the individual had spent in training on the employment provisions of the ADA and the amount of time all supervisors with hiring and supervisory responsibilities had spent in training on the ADA. Other questions related to the types of resources the individual completing the survey utilized to gain information about the ADA: official documents, human resource and legal professionals, professionals with expertise in the ADA, and seminars and training sessions.

Part II of the survey contains 20 case scenarios describing employment situations with an applicant or employee. Each case is approximately three or four sentences long and provides basic facts, rather than detailed information.

For each case scenario, the respondent had to indicate whether: (a) the employer's actions in the case were in compliance with the ADA, (b) the employers' actions in the case were not in compliance with the ADA, (c) the case did not provide enough information to determine compliance, or (d) the requirements of the ADA were not clear about the issues raised in this situation.

The Institutional Review Board of Oklahoma State University (Appendix E), approved the research design, including survey (Appendix C) and cover letter (Appendix D), prior to its submission and distribution to the survey group.

Data Collection

Data collection began with the mailing of an individualized cover letter with (Appendix D) the survey to 390 individuals responsible for hiring in their companies. The cover letter stated the subject and purpose of the study, how the individual's name was obtained, a statement regarding the anonymity of individual responses, and a pre-addressed, stamped envelope and a survey (Appendix C). Each survey contained a number coded for purposes of tracking which individuals had responded.

Responses to the first mailing totaled 156. Four weeks after the first mailing, a second mailing went out to those who had not responded to the first mailing. A cover letter reiterated the information contained in the first letter and stated that a response had not been received to the first letter. The letter also indicated that a sufficient number of responses was needed for statistical purposes and that the number had not yet been reached. This second mailing returned 85 completed surveys.

Combined response to the two mailings was 241. This is a response rate of 27.1% for the population of 889 member organizations of the Oklahoma State Chamber of Commerce with 15 or more employees and a response rate of 61.7% for the sample population of 241 which agreed to participate in the survey.

Five surveys were returned either without responses or with the majority of questions unanswered. Nine individuals sent back the survey or called to indicate that they would not be able to complete the survey due to company policy.

CHAPTER 4

RESULTS

Introduction

This chapter contains data received from the ADA employer surveys and an analysis of it. A description of the methodology used to record and categorize the data begins the chapter, followed by a profile and description of the data. Responses from Part I of the survey contain the factors related to employer characteristics (independent variables). The number of correct responses in Part II of the survey were converted into an ADA Application Score which measures employers' level of understanding of the application of the employment provisions of the ADA (dependent variable).

Employers' overall level of understanding as measured by the ADA Application Scores is presented first. A comparative analysis of the characteristics of employers and the relationship of those characteristics to the ADA Application Scores is described. Finally, a multiple regression equation is calculated to test the statistical significance of each of the employer characteristics (independent variable) in predicting the level of understanding employers have of the employment provisions of the ADA (dependent variable) as measured by the ADA Application Scores.

Table 1

Independent Variables Employed in Study, Description, Mean, Standard Deviation and Hypothesized Sign for Each Variable

Variable Name	Variable Description	Mean	Standard Deviation	Hypothesized Sign
<u>Personal Characteristics:</u>				
Gender	Male respondent coded 0; female coded 1.	.475	.500	(+)
Age	Year of birth converted into age.	46.614	9.493	(+)
Race/Ethnic Background	Non-Caucasian response coded 0; Caucasian coded 1.	.880	.326	(-)
Level of Formal Education	Number of years representing highest level of formal education completed.	16.041	2.016	(+)
Major Field of Study	Major field of study for those completing a college degree; fields of human resources, personnel management, and counseling coded as 1 with all others coded as 0.	.114	.318	(+)

Table 1 Continues

Table 1 Continued

Variable Name	Variable Operationalized	Mean	Standard Deviation	Hypothesized Sign
Familiarity with Person(s) with Disabilities	Affirmative answer to one of the following types of relationships; co-worker/colleague, neighbor/friend, family member or self coded as 1; otherwise coded as 0.	.850	.358	(+)
<u>Organizational Characteristics:</u>				
Number of Employees	Numerical estimate of number of employees in employing organization.	757.216	2957.225	(+)
Number of Estimate of Employees with Disabilities	Numerical estimate of number of persons with disabilities hired by employing organization over previous five year period; numerical estimate converted to percentage of numerical estimate of total number of employees.	3.100	3.933	(+)

Table 1 Continues

Table 1 Continued

Variable Name	Variable Operationalized	Mean	Standard Deviation	Hypothesized Sign
Type of Business Activity	Type of business in which the employing organization is engaged: manufacturing is coded 1, sales is coded 2, service 3, other 4, education 5, finance 6, health 7.	3.301	1.742	(+)
Type of position held by individual responsible for hiring	The type of position that the individual responsible for hiring holds within the employing organization: primary or sole responsibility is to serve as the director of human resources or personnel is coded as 0; all other positions are coded as 1.	.555	.498	(-)
<u>Training and Resource Characteristics:</u>				
Hours of Training - Individual	Estimate of the total number of hours that the individual responsible for hiring has spent receiving training or getting information about the ADA.	29.400	40.881	(+)

Table 1 Continues

Table 1 Continued

Variable Name	Variable Operationalized	Mean	Standard Deviation	Hypothesized Sign
Hours of Training - Other Supervisors	Estimate of the total number of hours that other supervisors in the employing organization have spent receiving training or getting information about the ADA.	18.921	49.873	(+)
Types of Information Resources - ADA	The types of information resources related to the ADA available to the individual responsible for hiring are listed. An affirmative response to one type of resource is coded as 1, two types as 2, three types as 3, four types as 4, five types as 5 and none as 0.	3.120	1.031	(+)
Types of Information Resources- Disabilities Awareness	The types of information resources related to disabilities awareness available to the individual responsible for hiring are listed. An affirmative response to one type of resource is coded as 1, two types as 2, three types as 3, four types as 4, and none coded as 0.	.850	.358	(+)

Recording Data

Responses to Part I: Respondent Background Information

Part I of the survey consists of questions asking employers to respond to the survey for three types of information: (a) personal characteristics of the employer, (b) organizational characteristics of the employing organization, and (c) the training and information resource characteristics of the employer and the employing organization.

Questions about personal characteristics of the respondent reference gender, age, race or ethnic background, number of years of formal education completed, and major field of study in education. The respondents were also asked whether they have any of the following types of relationships: a family member with a disability, neighbor or friend with a disability, or a colleague or co-worker with disability. Respondents were also asked whether they have a disability.

Questions on gender, age, number of years of formal education completed, and employers' familiarity with people with disabilities had close-ended response choices. The designation of major field of study was open-ended, and responses were assigned to following categories: (a) human resources/personnel management/counseling, (b) social sciences, (c) liberal arts, (d) sciences/math/engineering, (e) business, (f) education, and (g) other fields of study.

Questions related to the organizational characteristics of the company or entity that employs the respondent address: (a) type of position held by the respondent within the company, (b) estimate of the number of people employed by the company, (c) estimate of

the number of people with disabilities employed over the last five years, and (d) the type of business activity in which the company is engaged.

Responses to the questions about number of employees and were grouped in numerical ranges. Responses to the question about number of individuals with disabilities employed over the last five years were converted to a percentage based on the total number of employees reported. This percentage is labeled the hiring rate of employees with disabilities over the previous five years.

Categories composed the type of position: human resources/personnel director or manager, and other position (e.g., manager with personnel responsibilities, president or CEO, or other). The type of business question offered four response choices: manufacturing, sales, service, and other with space provided to identify the type of business. Based on the responses provided, survey results reflect seven categories of types of business--manufacturing, sales, service, education, finance, health care, and other.

The questions in the study pertaining training include: (a) the number of hours the respondent had spent receiving training or getting information regarding the employment provisions of the ADA and (b) the number of hours other supervisors or managers had spent receiving information or training on the employment provisions of the ADA. Responses were open-ended to each of the latter questions. Data analysis used the mid-point for questions whose answers were a range of numbers (e.g., the analysis used 25 for a questions with a response of 20 to 30 training hours).

Questions related to the information resources include: (a) types of resources

available regarding the employment provisions (official documents from the EEOC, materials from legal/human resource professionals, seminars or training, professional with expertise in the ADA, and other) and (b) types of resources available regarding disability awareness (written materials from disabilities-related organizations, seminars/training, professionals with expertise in the ADA, and other). Questions were close-ended as to the availability of each type of resource.

The responses to 241 completed surveys provide the data for the study. Response totals for each question vary because some respondents did not answer every question.

Responses to Part II: The ADA Application Score

There were four response choices to the case examples presented in Part II that provided data used to calculate an ADA Application Score for each participant in the study. The choices were (a) action of the employer is in compliance with the requirements of the employment provisions of the ADA, (b) action of the employer is not in compliance with the requirements of the employment provisions of the ADA, (c) case does not provide enough information to determine compliance or non-compliance with the ADA, and (d) requirements of the ADA do not address the issues raised in the case. If a respondent chose more than one response, neither response was recorded, and the response was coded as missing. Likewise, if a response was written in without selection of one of the designated responses, the response was coded as missing. Surveys in which responses were given to fewer than half of the case scenarios were not included in the study.

With a total of 20 case examples presented, there were 20 possible correct answers. The cumulative number of responses that correctly identified the action taken by the employer in the case scenarios was calculated and converted to a percentage. The percentage score of correct responses was used in making statistical comparisons and performing a test for statistical significance of the independent variables (employer characteristics). The score is referred to as the ADA Application Score.

Of the 241 completed surveys (N = 241), 44% of the respondents correctly answered nine or fewer of the case scenarios (an ADA Application Score of 45% or less) with 56% correctly answered 10-20 of the case scenarios (an ADA Application Score of 50-100%).

Data Analysis

ADA Application Scores: Dependent Variable

Table 2 shows the frequency and distribution of the ADA Application Scores among all respondents. The scores range from a low score of 5% (one correct answer) to a high score of 75% (15 correct answers). No score was above 75%. Fifty-six percent (56%) of the scores were 50% or better with 20% of the scores being 50%.

Employer Characteristics: Independent Variables

Gender. Table 3 represents the distribution of ADA Application Scores according to the gender of the employer. Fifty-two and a half percent (52.5%) of the respondents are men and 47.5% are female (see Table 3) . Male respondents and female respondents had

Table 2

Distribution and Frequency of ADA Application Scores

ADA Application Scores	Scores	Frequency	Percent	Cum Percent
	5%	1	.4	.4
	10%	1	.4	.8
	15%	1	.4	1.2
	25%	3	1.2	2.5
	30%	15	6.2	8.7
	35%	19	7.9	16.6
	40%	30	12.4	29.0
	45%	36	14.9	44.0
	50%	49	20.3	64.3
	55%	53	14.5	78.8
	60%	21	8.7	87.6
	65%	19	7.9	95.4
	70%	10	4.1	99.16
	75%	1	.4	100.0
	80%	0	0	100.00
	85%	0	0	100.00
	90%	0	0	100.00
	95%	0	0	100.00
Total	241	100.00	100.0	100.0

Table 3

Distribution of ADA Application Scores by Gender of Employer

Employer's Gender	Number of Responses in Category	ADA Application Scores	
		0-45%	50%-100%
Male	52.5%	44%	56%
	(125)	(55)	(70)
Female	47.5%	42%	58%
	(113)	(47)	(66)

Total responses to question = 238

Note. Numbers of respondents in each category are listed in parentheses below percentages.

similar ADA Application Scores. Fifty-six (56%) of men scored 50%, or better and 56% of the women scored 50% or better.

Age. In Table 4 distribution of ADA Application Scores is shown according to the age of the employer. The age of employers ranges from 27 years old to 80 years old. Respondents are grouped into three ranges for purposes of analyzing survey responses: (a) 40 years old and under, (b) 41-49 years old and (c) 50 years old and above. Twenty-six percent (26%) are 40 years old and under, 37 % are 41-49 years old and 37% are 50 years old or above.

The ADA Application Scores show variation according to age with younger respondents scoring higher than older respondents. The respondents under the age of 50 score higher than those over the age of 50 on the ADA Application Score. Also, the scores of those under the age of 40 are higher than those over the age of forty. Sixty-six percent (66%) of those age 40 and under scored 50% or better, 57% of those ages 41-50 scored 50% or better, and 47% of those age 50 or older scored 50% or better.

Race or Ethnic Background. Table 5 divides the distribution of ADA Application Scores according to the race or ethnic background of the employer. The overwhelming majority of the respondents are Caucasian. Eighty-eight percent (88%) indicate they are Caucasian, and 12% indicate they are of a racial or ethnic background other than Caucasian (e.g., African-American, Asian American, Hispanic American, Native American, or other).

There is little variation in the scores of Caucasians and non-Caucasians in the ADA

Table 4

Distribution of ADA Application Scores by Age of Employer

Employer's Age	Number of Responses in Category	ADA Application Score	
		0-45%	50%-100%
40 Years Old or Under	22%	33%	67%
	(52)	(17)	(35)
41-49 Years Old	61%	45%	65%
	(142)	(64)	(78)
50 Years Old and Above	17%	51%	49%
	(39)	(20)	(19)

Total responses to question = 233

Note. Numbers of respondents in each category are listed in parentheses below percentages.

Table 5

Distribution of ADA Application Scores by Race/Ethnic Background of Employer

Employer's Race/Ethnic Background	Number of Responses in Category	ADA Application Scores	
		0-45%	50%-100%
Caucasian	88%	43%	57%
	(212)	(92)	(120)
Non-Caucasian	12%	45%	55%
	(29)	(13)	(16)

Total responses to question = 241

Note. Numbers of respondents in each category are listed in parentheses below

percentages

Application Scores. Among Caucasians 43% scored 45% or below and 57% scored 50% or better. For non-Caucasians, 44% scored 45% or below with 55% scoring 50% or better.

Number of Years of Formal Education. Table 6 reports the distribution of ADA Application Scores according to the level of formal education that the employer has completed. Respondents were grouped into three categories according to number of years of formal education which had been completed: (a) high school, (b) bachelors degree, and (c) masters or doctoral degree. Twenty-eight percent (28%) of the respondents indicated high school as the highest level of education completed, 44% indicated they had a bachelor's degree, and 28% indicated they had completed a master or doctoral degree.

Individuals with at least a bachelor's degree scored higher than those with a high school education. Sixty-five percent (65%) of those with bachelor's degree and 64% of those with a graduate degree scored 50% or better on the case scenarios. Fifty-one percent (51%) of those who had a high school education scored 50% or better.

Major Field of Study in Education. In Table 7 the distribution of ADA Application Scores is divided by the employer's major field of study in education. Forty-six percent (46%) of respondents noted that their major field of study was in the area of business with 12% indicating a major in education. Eleven percent (11%) indicated a major in the area of human resources/ personnel management/ counseling, 10% in liberal arts, 9% in social sciences, 7% in math/science/engineering, and 5% in other fields. For purpose of analysis, two groupings were used: human resources-related areas and other fields of

Table 6

Distribution of ADA Application Scores by Employers' Level of Formal Education

Completed

Employers' Level of Formal Education Completed	Number of Responses in Category	ADA Application Scores	
		0-45%	50%-100%
High School	28%	49%	51%
	(67)	(33)	(34)
Bachelors Degree	44%	45%	55%
	(107)	(48)	(59)
Masters/Doctoral Degree	28%	36%	64%
	(67)	(24)	(45)

Total responses to question = 241

Note. Numbers of respondents in each category are listed in parentheses below percentages.

Table 7

Distribution of ADA Application Scores Based on Employers' Major Field of Study

Employers' Major Field of Study	Number of Responses in Category	ADA Application Scores	
		45% or Below	50%–60%
Human Resource- related Field of Study^a	11% (19)	32% (6)	68% (13)
Other Fields of Study^b	89% (148)	43% (63)	57% (85)

Total number of responses to question = 167

Note. Number of respondents in each group are listed in parentheses below each group.

^aHuman resource related fields include human resources, personnel management, and counseling.

^bOther fields of study include business, education, liberal arts, sciences/math/engineering, and social sciences.

study (i.e. fields of study other than human resources, personnel management or counseling). Using these categories, 11% majored in human resource-related fields and 89% majored in other fields of study.

Individuals with degrees in human resources, personnel management, or counseling scored higher than those with degrees in other fields of study. Sixty-eight percent (68%) of those with a degree in human resources and related areas scored 50% or better. For those majoring in other fields, 57% scored 50% or better.

Relationship with a Person(s) with a Disability. Table 8 shows little variation in the distribution of ADA Application Scores according to whether the employer has a personal relationship with a person(s) (i.e. co-worker/ colleague, friend/neighbor, or family member, or self- disabled). The two groups, with 56% and 57% respectively, scored 50% or better on the ADA Application Score.

However, in Table 9 a breakdown by type of personal relationship does show some variation in the level of correct responses. Sixty-seven percent (67%) of the respondents state they have a co-worker or colleague with a disability, and 65% respond they have a friend or neighbor with a disability, while 25% report they have a family member with a disability. A total of 85% of the respondents indicate they have a co-worker or colleague, a friend or neighbor, or a family member with a disability.

Employers who indicate they have a co-worker or colleague with a disability scored higher than those who do not. Sixty-percent (60%) of those who indicate they have a co-worker or colleague with a disability scored 50% or better compared to 51% of those who

Table 8

Distribution of ADA Application Score According to Employers' Relationship with a Person(s) with Disability

Employer Has a Relationship with a Person(s) with a Disability^a	Number of Responses in Category	ADA Application Score	
		0-45%	50%-100%
Yes	15%	44%	56%
	(30)	(16)	(20)
No	85%	44%	56%
	(204)	(89)	(115)

Total number of responses to question = 240

Note. Numbers of respondents in each category are listed in parentheses below percentages.

^aRelationship with a person(s) with a disability means that the respondent indicated that they have a family member, friend, neighbor, co-worker, or colleague with a disability, or they themselves are disabled.

indicate they do not have a co-worker or colleague with a disability who scored 50% or better.

Respondents who report they have a friend or neighbor with a disability have similar scores to those who report they do not have a friend or neighbor with a disability. Fifty-seven percent (57%) of those who indicate they have a friend or neighbor with a disability scored 50% or better while 58% of those who indicate they do not have a friend or neighbor with a disability scored 50% or better.

Respondents who indicate they have a family member with a disability had lower ADA Application Scores than those who indicate they did not have a family member with a disability. Fifty-one percent (51%) of those who indicate they have a family member with a disability scored 50% or better while 60% of those who did not indicate they have a family member with a disability scored 50% or better.

Respondents with a Disability. Table 9 also shows the distribution of ADA Application Scores for employers who report they have a disability. Seven percent (7%) of the respondents state they personally have a disability. Those who state they have a disability had considerably lower ADA Application Scores on case scenarios than those who did not indicate they have a disability. Forty one-percent (41%) of those with disabilities scored 50% or better and 57% of those without disabilities scoring 50% or better.

Number of Employees. In Table 10 the distribution of the ADA Application Scores are divided by the number of people employed by the companies or entities represented in

Table 9

Distribution of ADA Application Scores According to Employers' Relationships with
Person(s) with a Disability by Type of Relationship

Employers' Relationships with Person(s) with a Disability by Type of Relationship	Number of Responses in Category	ADA Application Scores	
		0-45%	50%-100%
Co-worker or Colleague with a Disability			
Yes	69%	40%	60%
	(161)	(64)	(87)
No	31%	49%	51%
	(71) ^a	(35)	(36)
Friend or Neighbor with a Disability			
Yes	69%	43%	57%
No	(155)	(67)	(88)
	31%	42%	58%
	(71) ^a	(30)	(41)

Table 9 Continues

Table 9 Continued

Employers' Familiarity with Person(s) with a Disability by Type of Relationship	Number of Responses in Category	ADA Application Scores	
		0-45%	50%-100%
Family Member with a Disability			
Yes	26%	49%	51%
No	(57)	(28)	(29)
	74%	40%	60%
	(165) ^c	(66)	(99)
Employer has a Disability			
Yes	7%	59%	41%
No	(17)	(10)	(7)
	93%	43%	57%
	(223) ^d	(95)	(128)

Note. Number of respondents in each category are listed in parenthese below percentages.

^aTotal numbers of responses to question = 222

^bTotal number of responses to question = 226

^cTotal number of responses to question = 222

^dTotal number of responses to question = 240

Table 10

Distribution of ADA Application Scores by Employers' Size as Measured by Number of Employees

Number of Employees	Number of Responses in Category	ADA Application Scores	
		0-45%	50%-100%
Under 100	41%	49%	51%
	(98)	(48)	(50)
100-500	37%	42%	58%
	(89)	(37)	(52)
Over 500	22%	37%	63%
	(54)	(20)	(34)

Total number of responses to question = 241

Note. Numbers of respondents in each category are listed in parentheses below percentages.

the survey. The number of employees ranges from 14 to 40,000. Companies and entities were grouped according to the following sizes: (a) below 100 employees (41%), (b) 100-500 employees (37%), and (c) over 500 employees (21%).

Respondents employed by companies or entities with a larger number of employees had better ADA Application Scores than those with smaller numbers of employees. Sixty-three percent (63%) of respondents from companies employing 500 or more people scored 50% or better, with 58% from companies employing 100-500 employees scoring 50% or better, and 51% of companies employing under 100 scoring 50% or better.

Number of Employees with Disabilities Employed over the Previous Five Years. The number of employees with disabilities employed over the previous five years is converted to a percentage based on total number of employees. This percentage becomes the hiring rate for employees with disabilities for the employing organization. The distribution of ADA Application Scores according to the hiring rate of the employing organization is shown in Table 11. Thirty-one percent (31%) of the companies indicate that no individuals with disabilities had been hired by the company in the last five years. Forty-one percent (41%) indicate a hiring rate of 3% or less with 28% stating that more than 3% of those hired in the last five years had disabilities.

Respondents from companies that indicated they had not hired any employees with disabilities over the last five years scored lower on the case scenarios than those who had hired people with disabilities over the last five years. Of those indicating they had not hired any employees with disabilities over the last five years, 47% scored 50 % or above,

Table 11

Distribution of ADA Application Scores by Employers' Hiring Rate for Persons with Disabilities Over Previous Five Years

Employers' Hiring Rate for Persons with Disabilities Over the Previous Five Years	Number of Responses in Category	ADA Application Scores	
		0-45%	50%-100%
None	31%	53%	47%
	(62)	(33)	(29)
Less Than 3%	41%	39%	61%
	(82)	(32)	(50)
More Than 3%	28%	42%	58%
	(57)	(24)	(33)

Total number of responses to question = 201

Note. Numbers of respondents in each category are listed in parentheses below percentages.

while 61% of those with up to a 3% hiring rate scored 50 % or above; and 58% of those with a 3% or better hiring rater scored 50 % or better.

Type of Business Activity. Table 12 displays the distribution of ADA Application Scores according to the types of business activities of the employing organizations. Twenty-four percent (24%) are in service activities, 23% in manufacturing, 11% in education, 10% in sales, 7% in finance, 3% in health care, and 27% in some other type of business.

Employers in the areas of education and finance have the highest scores. Seventy-seven percent (77%) of those in education scored 50% or better with 71% of those in the field of finance scoring 50% or better. Sixty-six percent (66%) of those in health care scored 50% or better with 58% in sales scoring 50% or better. Fifty-three percent (53%) of the employers in service and forty-eight % in manufacturing scored 50% or better. Of those indicating other types of business activity, 52% scored 50% or better.

Respondent Position in Company. Table 13 represents the distribution of ADA Application Scores by the type of positions held by employer in the employing organizations. Fifty-six percent (56%) of the respondents indicate they hold the position of human resources/personnel director or manager. The remainder hold other positions in the company. Respondents with the position of human resource or personnel director or manager scored very similar to those who were in other positions with 56% and 55%, respectively, scoring 50% or better.

Table 12

Distribution of ADA Application Scores by Type of Business Activity of Employing Organization

Type of Business Activity of Employing Organization	Number of Responses in Category	ADA Application Scores	
		0-45%	50%–100%
Service	23%	47%	53%
	(57)	(27)	(30)
Manufacturing	24%	52%	48%
	(56)	(29)	(27)
Education	11%	23%	77%
	(26)	(6)	(20)
Sales	10%	42%	58%
	(24)	(10)	(14)
Finance	6%	29%	71%
	(14)	(4)	(10)
Health	3%	38%	62%
	(8)	(3)	(5)
Other	23%	48%	52%
	(54)	(26)	(28)

Total responses to question = 239

Note. Numbers of respondents in each category are listed in parentheses below percentages.

Table 13

Distribution of ADA Application Scores by Type of Position Held by Employers' in the
Employing Organization

Type of Position Held by Employer in the Employing Organization	Number of Responses in Category	0-45%	50%-100%
Human Resources/ Personnel Manager or Director	56% (131)	44% (58)	56% (73)
Other Position	44% (105)	44% (46)	56% (59)

Total number of responses to question = 236

Note. Numbers of respondents in each category are listed in parentheses below percentages.

Hours of Training Received by Individual Responsible for Hiring. Table 14 displays the hours of training received by the individual responsible for hiring in relationship to the distribution of the ADA Application Scores. Nine percent (9%) of the respondents indicate that they have not spent any time receiving training or gaining information about the employment provisions of the ADA. Thirty-four percent (34%) indicate they have spent 1-10 hours; 23% indicate they had spent 11-20 hours; 10% indicate they had spent 21-30 hours; 9% indicate they had spent 31-40 hours, and 15% indicate they had spent more than 40 hours in training or receiving information about the employment provisions of the ADA. Respondents who spent more hours training and receiving information about the ADA have higher ADA Application Scores.

Seventy-four percent (74%) of those who spent 40 or more hours in training scored 50% or better, while 61% of those spending 30-40 hours scored 50% or better. Fifty-four percent (54%) of those who spent 21-30 hours receiving training scored 50% or better. Fifty-eight percent (58%) of those spending 11-20 hours scored 50% or better, and 47% of those spending 1-10 hours scored 50% or better.

Hours of Training Received by Other Supervisors in the Company. In Table 15 the amount of time that other supervisors or managers have spent receiving training or getting information about the employment provisions of the ADA is reported according to the distribution of ADA Application Scores. Eleven percent (11%) report spending no time, 62% report 1-10 hours, 12% report 11-20 hours of training, 2% report 21-30 hours of training, 4% report 31-40 hours of training, and 9% report over 40 hours of training.

Table 14

Distribution of ADA Application Scores by Number of Hours of Training in the Provisions of the ADA Completed by Employer

Number of Hours of Training on the Provisions of the ADA Completed by Employer	Number of Responses in Category	ADA Application Scores	
		0-45%	50%-100%
0	8%	50%	50%
	(20)	(10)	(10)
1-10	34%	53%	47%
	(78)	(41)	(37)
11-20	23%	42%	58%
	(52)	(22)	(30)
21-30	10%	46%	54%
	(24)	(11)	(13)
31-40	9%	29%	71%
	(21)	(6)	(15)
41-40	15%	26%	74%
	(35)	(9)	(26)

Total number of responses to question = 230

Note. Numbers of respondents in each category are listed in parentheses below percentages.

Table 15

Distribution of ADA Application Scores by Number of Hours of Training in the Provisions of the ADA Completed by Other Supervisors in the Employing Organization

Number of Hours of Training Completed in the Provisions of the ADA by Other Supervisors in the Employing Organization	Number of Responses in Category	ADA Application Scores	
		0-45%	50%-100%
0	11%	57%	43%
	(23)	(13)	(10)
1-10	62%	45%	55%
	(132)	(60)	(72)
11-20	12%	42%	58%
	(26)	(11)	(15)
21-30	2%	75%	25%
	(4)	(3)	(1)
31-40	4%	11%	89%
	(9)	(1)	(8)
41-40	9%	15%	85%
	(20)	(3)	(17)

Total number of responses to question = 214

Note. Numbers of respondents in each category are listed in parentheses below

percentages.

Supervisors who have spent more hours in training scored better on the ADA Application Score. Eighty-five percent (85%) of those who spent more than 40 hours in training scored 50% or better, 89% of those who spent 31-40 hours of training scored 50% or better, 25% of those who spent 21-30 hours in training scored 50% or better, 58% of those who spent 11-20 hours in training scored 50% or better, and 55% of those who spent 1-10 hours in training scored 50% or better.

ADA Information Resources Available. Table 16 reports the ADA Application Scores according the numbers of types of ADA information resources available employers regarding the ADA. Those indicating they had more resources available to them on the employment provisions of the ADA scored better than those with fewer resources available. Forty-seven percent (47%) of those with one resource available scored 50% or better, 37% of those with two resources scored 50% or better, while 60% of those indicating they had three types of resources available scored 50% or better. Those indicating they had four types of resources available had 61% scoring 50% or better while those indicating they had all four identified resources plus other resources available had 86% scoring 50% or better.

Table 17 shows the ADA Application Scores by number of types of resources on disability awareness available to employers. Forty-five percent (45%) of the employers who indicate they had one resource available on disability awareness scored 50% or better, while 54% of those that indicate they had two or more resources available scored 50% or better. Sixty-three percent (63%) of those indicating they had three resources

Table 16

Distribution of ADA Application Scores by Numbers of Types of Information ResourcesAvailable to Employers Regarding Employment Provisions of ADA

Number of Types of Information Resources Regarding Employment Provisions of the ADA Available to Employers^a	Number of Responses in Category	ADA Application Scores	
		0-45%	50%-100%
None	1%	67%	33%
	(3)	(2)	(1)
One Type of Resource	7%	53%	47%
	(17)	(9)	(8)
Two Types of Resource	15%	63%	37%
	(35)	(22)	(13)
Three Types of Resource	34%	40%	60%
	(79)	(32)	(47)
Four Types of Resource	40%	39%	61%
	(92)	(36)	(58)
Five Types of Resource	3%	14%	86%
	(7)	(1)	(6)

Total number of responses to question = 233

Note. Numbers of respondents in each category are listed in parentheses below percentages.

Table 17

Distribution of ADA Application Scores According to Numbers of Types of Information Resources Related to Disability Awareness Available to Employers

Numbers of Types of Information Resources Related to Disability Awareness Available to Employers^a	Number of Responses in Category	ADA Application Scores	
		0-45%	50%-100%
None	6%	50%	50%
	(14)	(7)	(7)
One Type of Resource	21%	55%	45%
	(49)	(27)	(22)
Two Types of Resource	23%	46%	54%
	(52)	(24)	(28)
Three Types of Resource	46%	37%	63%
	(104)	(39)	(65)
Four or More Types of Resource	4%	33%	67%
	(9)	(3)	(6)

Total number of responses to question = 228

Note. Numbers of respondents in each category are listed in parentheses below percentages.

^aThe types of resources listed in the survey were: (a) materials from organizations specializing in disabilities, (b) seminars/training sessions, (c) professionals with specific

expertise in disability awareness and a space for listing other resources available to the employer.

^aThe types of resources listed in the survey were: (a) official documents from the EEOC, (b) materials from legal human resource professionals, (c) seminars/training, (d) professionals with expertise in the ADA and space for listing other resources available to employer.

available scored 50% or better, and 67% of those who indicate they had three resources plus other resources available to them scored 50% or better.

Statistical Analysis of Dependent and Independent Variables

In order to test whether employer characteristics (independent variables) are useful predictors of employers' knowledge and understanding of the application of the employment provisions of the ADA (dependent variable), a regression analysis was calculated. Employer characteristics in the three areas (personal characteristics, organizational characteristics and training and resources characteristics) were analyzed to determine the extent to which each predicts employers ADA Application Scores (see Table 18).

The standardized regression coefficients and corresponding t-ratio was calculated for each variable. AGE was the only variable which showed sufficient strength as a predictor of employers' ADA Application Score (t ratio = -2.473). However, the relationship is in the opposite direction from what was predicted. The younger a person is the more likely he or she is to be knowledgeable about the application of the employment provisions of the ADA.

MAJOR FIELD OF STUDY shows a strong relationship, but not at a statistically significant level (t - ratio = 1.564). The equation does show that respondents who majored in human resource, personnel management or counseling fields of study have more understanding about the application of the employment provisions of the ADA. All

Table 18

Multiple Regression Equation Predicting ADA Application Scores by EmployerCharacteristics

Employer Characteristic	Standardized Regression Coefficient	T-/Rating
Gender	.069006	.662
Race	-.055295	-.560
Age	-.251824	-2.473*
Number of Years of Formal Education	.085967	.826
Field of Study	.161703	1.564
Familiarity with Disability	.093048	.918
Number of Employees	.087053	.834
Percentage of Employees with Disabilities	-.108007	-1.018
Type of Business Activity	-.078028	-.743
Respondent Position in Company	-0.20951	.195
Resources Available Regarding ADA Employment Provisions	.077076	.624
Resources Available Regarding Disability Awareness	.079949	.654

Table 18 Continues

Table 18 Continued

Employer Characteristic	Standardized Regression Coefficient	T-/Rating
Hours of Training Received by Person in Charge of Hiring	.049579	.443
Hours of Training Received by Other Supervisors	.040815	.392

*p < .05

other employer characteristics showed very weak relationships to the level of understanding employers have about the employment provisions of the ADA.

The regression analysis yielded an R square of .14970 which indicates that the factors explored provide very little explanation as to the level of knowledge and understanding that employers have of the employment provisions of the ADA.

Summary of Results

A majority of the employers, 56%, had ADA Application Scores of 50% or better. These employers understood the application of the employment provisions of the ADA in half or more of the case examples presented.

Several personal characteristics of employers show the strong relationship to employers' demonstrated level of understanding about the application of the employment provisions of the ADA although only one--age of the respondent--was statistically significant. Employers who had higher levels of formal education and employers who majored in fields of study related to human resources demonstrated more understanding of the ADA; however, the effect of these characteristics was not statistically significant.

Other personal characteristics of employers do not have an effect on demonstrated level of understanding. Employers who have personal relationships with people with disabilities and those who do not have these types of relationships had similar levels of understanding. Among the types of relationships, people who have a co-worker or colleague with a disability have somewhat more understanding than those who do not have a colleague or co-worker with a disability, and people with family members with

disabilities demonstrated less understanding. In addition, people with disabilities showed less understanding of the ADA than those without disabilities. The race or ethnic background and gender do not show an effect on the level of understanding of the ADA.

Several organizational characteristics are linked to higher levels of understanding about the application of the employment provisions of the ADA. Respondents from companies with more than 500 employees had greater understanding of the ADA as did respondents from companies with higher rates of employment of people with disabilities over the previous five-year period. Employers from companies or entities engaged in education and finance demonstrate higher levels of understanding of the ADA than those engaged in other types of businesses. Individuals responding for the company who held positions as directors or managers of human resources or personnel do not exhibit more understanding of the ADA than those in other positions in the company.

Training and resource characteristics of employers showed some relationship to level of understanding of the employment provisions of the ADA. The respondents who have spent more hours in training about the ADA demonstrate more understanding compared to those who indicate fewer hours of training and other supervisors or managers who have spent more time in training on the ADA also show more understanding compared to those who have spent fewer hours in training. Also, those who indicated they have more types of resources available regarding the ADA and disability awareness also display more understanding. None of the training and resource characteristics of employers showed a statistically significant relationship, however.

CHAPTER 5

FINDINGS AND CONCLUSIONS

Interpretation of Findings

The responses to the survey of employers measuring their understanding of the application of the employment provisions of the ADA indicates a higher than expected yet relatively low level of understanding. A little over half (56%) of the employers surveyed identified the correct application of the employment provisions in 50% or more of the cases presented.

The ADA Application Scores are not only relatively low they are also clustered in a narrow range. Fifty percent (50%) of the scores are within a range from 45% to 55%. Since there is such limited variations in the demonstrated level of understanding that variables have a small range of differences to explain.

In examining the relationship between selected employer characteristics and the demonstrated level of understanding of the ADA, the results of the survey yielded the following findings:

1. Hypothesis #1 is supported. The majority of employers correctly identified whether the actions of the employer were in compliance or out of compliance with the ADA in 50% or more of the case examples.
2. Hypothesis #2 is not supported. Female employers do not demonstrate better understanding of the ADA than male employers.

3. Hypothesis # 3 is not supported. Older employers do not demonstrate better understanding of the ADA than older employers. This is the only employer characteristic that had a statistically significant effect on employers' understanding of the ADA, although it was in the opposite direction from the hypothesis.
4. Hypothesis # 4 is not supported. Employers who are members of racial or ethnic minorities did not demonstrate better understanding of the ADA than those those who are not.
5. Hypothesis # 5 is supported. Employers who have completed more years of formal education demonstrate better understanding of the ADA than those with fewer years of formal education.
6. Hypothesis #6 is supported. Employers who majored in human resource-related fields of study demonstrate better understanding of the ADA than those who majored in other fields of study.
7. Hypothesis #7 is not supported. Employers who have personal relationships with individuals with disabilities do not demonstrate better understanding of the ADA.
8. Hypothesis # 8 is supported. Employers within organizations with large numbers of employees demonstrate better understanding of the ADA than those with fewer employees.
9. Hypothesis # 9 is supported. Employers within organizations that have higher rates of employment of people with disabilities demonstrate better understanding of the ADA than those with lower rates of employment of people with disabilities.

10. Hypothesis # 10 is supported. Employers from organizations engaged in education and finance demonstrate better understanding of the ADA than employers engaged in other types of business activity.
11. Hypothesis #11 is not supported. Employers in the positions of human resources or personnel director or manager do not demonstrate better understanding of the ADA than those in other types of positions.
12. Hypothesis #12 is supported. Employers within employing organizations in which the individual responsible for hiring has spent more hours receiving training in the ADA demonstrate better understanding of the ADA.
13. Hypothesis #13 is supported. Employers within employing organizations in which other supervisors and managers have spent more hours receiving training in the ADA demonstrate better understanding of the ADA.
14. Hypothesis #14 is supported. Employers that have more information resources available to them on the ADA demonstrate better understanding of the ADA.
15. Hypothesis #15 is supported. Employers that have more information resources available to them on disabilities awareness demonstrate better understanding of the ADA.

Implications of Findings

The ADA was enacted seven years ago, and its provisions have been in full effect for all employers of 15 or more people for three years. Based on responses to the survey of employers in this study, people with the responsibility for implementation of the law--

employers--have a moderate level of understanding of the law.

In analyzing the employer characteristics related to higher levels of understanding of the ADA, employers with characteristics directly associated with increased knowledge--more years of formal education, majoring in a field of study related to human resources, more hours spent in training and receiving information about the ADA, and more resources available regarding the ADA and disability awareness--demonstrate greater understanding of the ADA than those with characteristics associated with less knowledge. In addition, the employers with characteristics that are the basis for having increased knowledge--with organizations engaged in education, having larger numbers of employees, and having a higher rates of employment of people with disabilities--also show higher levels of understanding of the ADA. This outcome suggests factors which create more knowledge about disabilities are linked to greater levels of understanding about the law's application. All employer characteristics associated with empathy-gender, age, race, or ethnic background and relationships with a person(s) with a disability do not show an impact on the employers level of understanding of the ADA.

Although those who developed and drafted the provisions of the Americans with Disabilities Act are very knowledgeable about people with disabilities and about the barriers that have hindered this segment of the population from gaining and maintaining employment, many employers are not aware of basic requirements of the ADA. Employers can implement the employment provision of the ADA at the policy and procedure level simply by following the directives in the law, regulations, and interpretive guidelines from the EEOC. However, the ability to comply with the law at

the management level requires that individuals responsible for hiring and supervision of employees have more knowledge about the ADA and disabilities if they are to properly apply the law in work situations. The knowledge about disabilities, their impact on the performance of specific job functions, and the constantly changing and improving accommodations available to assist people with disabilities in their activities is of vital importance to employers.

The results of this study have implications for academicians, policy makers, and employers. Academicians have given limited attention to policy implementation at the application level. Policy implementation studies generally focus on the actions taken by the agencies charged with implementation. This research typically analyzes the actions of the bureaucracy and the organized political groups and other interested parties. While this information is valuable, it is at least as important to examine implementation of ADA provisions at the company and employee level where the law affects workers directly.

Most analyses of the implementation of the ADA indicate that the law has been effectively implemented at the agency level. The EEOC and Department of Justice have taken the law and developed regulations, processes, and procedures closely aligned with the law and affirmed by its proponents as consistent with the law's purpose and intention. However, these studies do not provide any insight into how well the law is actually being applied in the work place.

Likewise, policy makers need to be aware that employers' lack of understanding of the ADA provisions may diminish the impact the law has upon employment levels of people with disabilities. Some people will argue that the provisions of the law itself are

ineffective since employment levels have not increased since enactment of the ADA compared to periods before its enactment. However, policy-makers need to know that many employers do not understand the law, and this fact has helped to hinder the law's effectiveness. Increased efforts to educate employers and assist them in gaining a better understanding of the ADA may be a more appropriate action than modification or repeal of the law.

Employers should increase efforts to acquire more knowledge and understanding of the employment provisions of the ADA. Employers should consider two approaches. One approach is to provide a comprehensive training program for all employees with hiring or supervision responsibilities in their companies. An alternative approach is to develop personnel procedures that give employees with hiring and supervision responsibilities specific guidelines on identifying workplace situations covered under the ADA. Then employers should train employees with hiring and supervision responsibilities would be trained to assess situations and consult with specially trained individuals or teams as needed. Even small businesses could use the second approach using the services of a fee-based consultant.

A number of participants in this survey made written comments indicating their familiarity with the law and cited the reason for their personal lack of knowledge the fact that they had legal counsel to whom they could turn should the need arise. These comments suggests that many employers, in all probability, are involved in situations covered by the ADA and don't know it.

Employers generally focus on making certain that compliance is attained at the

policies and procedures level; however, EEOC complaints rarely address policy and procedure issues. Most cases filed concern actions taken by a supervisor or manager. In order to be in compliance at the management level, employers need to invest additional resources into raising the staff awareness in three areas: (a) the provisions of the law itself, (b) the nature and impact on work performance of various types of disabilities, and (c) the accommodations available that address various disabilities in the workplace.

Limitations of the Study

Internal and external validity considerations limit this study. Three factors restrict the internal validity. First, certain employer characteristics were selected for inclusion in the study. Some were chosen because they were included in previous studies of attitudes toward people with disabilities or the employment of people with disabilities. Others were selected based on intuitive notions of factors that might affect an employer's empathy or knowledge. Second, because only one employer characteristic was found to be statistically significant, there may be other characteristics, not explored in this study, which better explain difference in employers' level of understanding of the ADA. Third, the use of case examples with multiple choice response options may not represent a true measure of the respondents' level of understanding. Also, the surveyed population was not large enough to establish a significant level of validity.

Limitations also exist on the external validity of the study. The population selected for participation in the study is limited to Oklahoma companies that were members of the Oklahoma State Chamber of Commerce. The membership does not include all companies

in the state. Since there is a membership fee to join the organization and because its focus is primarily related to state policy issues, only companies able to pay the membership fee and potentially impacted by state policies are likely to be members. Therefore, this study's results cannot be generalized to employers on a regional or a national basis.

The study's reliability is limited by the fact that it is not possible to know if the appropriate person completed the survey (i.e. the person in charge of hiring) for the entity which was contacted. The person with the greatest responsibility and authority for hiring should have completed the survey. This person may or may not have been the person who actually completed the survey. Also, the study's reliability is limited by the lack of controls imposed on the time and environment in which the survey was completed.

Future Directions

This study is a preliminary effort to determine how well the employment provisions of the ADA are understood by those most responsible for its implementation--employers. In addition, this study examined a series of employer characteristics in order to determine the effect of certain characteristics on the differences in the level of understanding among employers. The moderate level of understanding, as measured by the instrument in the study and the identification of only one significant employer characteristic--age of the person in charge of hiring--indicates the need for additional research in several areas.

First, there should be additional refinement of the instrument used in the study or development of other measures. The survey reliability needs to be strengthened through administration to a larger population. The use of interviews of people in charge of hiring

could strengthened the survey. Also, future studies should include other supervisors, not only those in charge of hiring.

Second, future research should include additional reviews of implementation models used by employers. This type of research needs to identify the effectiveness of training all supervisors and of using a consultant referral model. Also, the study should incorporate research to determine if both the amount and type of training given to supervisors has an effect on their understanding of the application of the ADA.

It will be difficult to measure the effectiveness of the law if, in fact, the law is not truly being implemented due to a lack of understanding of its provisions and the application of those provisions. Additional research should be conducted to determine how well the law is understood as part of determining how well it is being implemented.

It is likely that social scientists and government experts will continue to measure employment level of people with disabilities and conduct comparative studies of the outcome of complaints filed for violation of the ADA versus other employment discrimination laws as a means of determining the success of the ADA. However, neither measure will result in establishing whether the actions of employers are consistent with the requirements of the law. This can only be accomplished by an assessment of how well the law is understood and how well it is being implemented.

Conclusions

The goal of the employment provisions of the Americans with Disabilities Act is to prohibit discrimination against people with disabilities in all aspects of employment.

Through a broad set of requirements, the law places the responsibility on employers to know who is covered under the law and how the law must be applied to each qualified applicant or employee with a disability. The challenge of implementing this law is complicated by the fact that discrimination against people with disabilities is believed to be based in ignorance, rather than hatred.

Seven years after passage of the law, employers have only a moderate level of understanding of how to apply the law in the work place. Employers who are younger have a significantly better understanding of the law than older employers. Moreover, those employers who have increased knowledge through more years of education and more hours spent in training about the ADA and disabilities have a greater level of understanding of the law.

The effectiveness of the ADA in diminishing discrimination against people with disabilities is linked to factors which diminish ignorance and increase knowledge and understanding about disabilities, the capabilities of people with disabilities and the employment provisions of the ADA.

REFERENCES

- Antonak, R. F. (1981) . Prediction of Attitudes Toward Disabled Persons: a Multi-variate Analysis. The Journal of General Psychology, 104, 119-123.
- Barlow, W E. (1991). An Act to Accommodate the Disabled. Personnel Journal. 7(11), 119-123.
- Barlow, W.E. and Hane, E. Z. (1992). A Practical Guide to the Americans with Disabilities Act. Personnel Journal, 7(6), 53-60.
- Barshop, I. (1959). Policy and Practice in Hiring Impaired Workers. Journal of Rehabilitation, 25 (6), 23-25.
- Bieliauskas, V.J., & Wolfe, H.E. (1960). The Attitude of Industrial Employers Toward Hiring of Former State Mental Hospital Patients. Journal of Clinical Psychology, 16(3), 256-259.
- Bolanovich, D. J., & Rasmussen, W.D. (1968). Survey of Employer Experiences And Opinions Concerning Mentally Retarded Persons as Employees (Final Report, VRA grant RD-2197). St. Louis, Mo. Jewish Employment and Vocational Service.

Boller, H. R. and Massengill, D. (1992). Public Employers' Obligation to Reasonably Accommodate the Disabled Under the Rehabilitation and Americans with Disabilities Acts. Public Personnel Management, 21(3), 273-300.

Breuer, N. L. (1993). Resources Can Relieve ADA Fears. Personnel Journal, September, 131-142.

Coil, J.H. III and Rice, C. M. (1994). The Tip of the Iceberg: Early Trends in Ada Enforcement. Employee Relations Law Journal, 19(4), 485-506.

Coil, J.H. III and Shapiro, L.J. (1996). The ADA at Three Years: a Statute in Flux. Employee Relations Law Journal, 21(4), 5-38.

Colbert, J. N., Kalish, R.A., & Chang, P. (1973). Two Psychological Portals of Entry for Disadvantaged Groups. Rehabilitation Literature, 34(7), 194-202.

Emener, W.G. & McHargue, J. M. (1978). Employer Attitudes Toward the Employment and Placement of the Handicapped. Journal of Applied Rehabilitation Counseling, 9(3), 120-125.

Esposito, M. D. (1992). How is Your Company Complying with the ADA? Management Accounting, November, 30-32.

Feldblum, C. R. (1991). Employment Protections. In West, Jane (Ed.) The Americans with Disabilities Act: From Policy to Practice. Milbank Quarterly, 61,

Supplements 1 and 2, 81- 110.

Fersh D. and Thomas, P.W. (1993). Complying with the Americans with Disabilities Act: a guidebook for management and people with disabilities. Westport, CT. Quorum Books, 261 pp.

Fonosch, G. and Schwab, L. (1981). Attitudes of Selected University Faculty Members Toward Disabled Students. Journal of College Student Personnel, 22, 229-235.

Frieden, L. (1992). Will the Americans with Disabilities Act Work?" The Journal of Occupational Therapy, 46(5), 468-69.

Frierson, J. G. (1992). A Fifty Questions Self-Audit on ADA Compliance. Employee Relations Today, Summer, 151-166.

Gade, E. and Toutges, G. (1983). Employers' Attitudes Toward Hiring Epileptics: Implications for Job Placement. Rehabilitation Counseling Bulletin, 26 (5), 353-356.

Gordon, P. L. (1992). The Job Application Process after the Americans with Disabilities Act, Employee Relations Law Journal, 18(2), 185-213.

Grace, H.A. (1970). A Systems Approach to Employment after Orthopedic Rehabilitation. Rehabilitation Counseling Bulletin, 13(3), 261-270.

Greenlaw, P. S. and Kohl, J. P. (1992) The ADA: Public Personnel

Management, Reasonable Accommodation and Undue Hardship. Public Personnel Management, 21 (4), 411-427.

Griffin, R. D. (1991). At Issue: Will the Americans with Disabilities Act Impose Excessive Costs on Society?" Congressional Researcher, 1 (32), 1009.

Guerri, E. (1996). Management Practices to Reduce Employment-Related Liability. Employment Relations Today, 23 (1), 77-89.

Hamilton, G. S. & Roessner, J.D. (1972). How Employers Screen Disadvantaged Job Applicants. Monthly Labor Review, 95 (9), 14-21.

Harris, L. and Associates. (1986). Disabled Americans' Self Perceptions: Bringing Disabled Americans into the Mainstream. N.Y.

Hartlage, L. C. (1965) . Factors Affecting Employer Receptivity Toward the Mentally Retarded. American Journal of Mental Deficiency, 70, 108-113.

Hartlage, L. C. (1966). Receptivity of employers to hiring mentally retarded and ex-mental patients. Journal of Counseling Psychology, 13, 112-114.

Hodge, J. W. and Crampton, S. M. (1993). ADA: Easier Said Than Done. Supervisory Management, April, 9-10.

Hollwitz, J., Goodman D.F., Bolte, D. (1995). Complying with the Americans with Disabilities Act: assessing the costs of reasonable accommodation. Public Personnel

Management, 24(2), 149-158.

Holmes, D.A. and McWilliams, J.M. (1981). Employers' Attitudes Toward Hiring Epileptics. Journal of Rehabilitation, 47(2), 20-21.

Job Accommodation Network (1994). Accommodation Benefit/Cost Data. Morgantown, W.V: Job Accommodation Network.

Johnson, W. G. and Baldwin, M. (1993). The Americans with Disabilities Act: Will It Make a Difference? Policy Studies Journal, 21(4), 775-788.

Jones, N. Lee. (1991). Essential Requirements of the Act: A Short History and Overview. In West, Jane (Editor). The Americans with Disabilities Act: From Policy to Practice. Milbank Quarterly, 61, Supplements 1 and 2. 25-53.

Kaplan, S. (1993). Americans with Disabilities Act: Recruiting Means More than Asking the Right Questions. Journal of Career Planning and Employment. 54.1.12-14.

Kim, P. S. (1996). Disability Policy: an Analysis of the Employment of People With Disabilities in the American Federal Government. Public Personnel Management, 25(1), 73-89.

Kohl, J. P. and Greenlaw, P. S. (1992). The Americans with Disabilities Act of 1990: Implications for Managers. Sloan Management Review, 33(3), 87-90.

Lewis, G. B. and Allee, C. L. (1992). Impact of Disabilities on Federal Career Success. Public Administration Review, 52(4), 389-397.

Loeb, A., Orkin, K., & Oldakowski, A. (1970). Three Methods of Contacting Employers to Obtain Jobs for the Rehabilitation Psychiatric Patient. Mental Hygiene, 54(1), 137-139.

Lotito, M. J. and Soltis, M. J. (1991). Prepare for the ADA Now. Industry Week, 24(19), 64.

Mello, J.A. (1995) . Employment Law and Workers with Disabilities: Implications For Public Sector Managers and Human Resource Practices. Public Personnel Management, 24(1), 75-88.

Meng, G. J. (1991). Definitive Job Descriptions Are Key to ADA Compliance. Employment Relations Today, 18 (3), 285-289.

Mullins, J. A. Jr., Rumrill, P. D. Jr. and Roessler, R. T. (1994) Use a Collaborative Approach to Reasonable Accommodation. HR Focus, 71(2), 16.

National Council on Disability. (1995). Ensuring Equal Access to the American Dream. Washington, D.C.: National Council on Disability.

Olshansky, S., Grob, S., & Malamud, I.T. (1958). Employers' Attitudes and Practices in the Hiring of Ex-mental Patients. Mental Hygiene, 42 (3), 391-401.

Perkins, N. L. (1991). What You Need to Know About the Americans with Disabilities Act. Supervisory Management, March, 4.

Perry, P. M. (1994). Ada Missteps (And How to Avoid Them). Training, October, 84-91.

Phelps, E.S. (1965). The Statistical Theory of Racism and Sexism. The American Economic Review, 62, 659-661.

Postol, L. P. and Kadue, K. D. (1991). An Employer's Guide to the Americans With Disabilities Act." Labor Law Journal, 42, 323-342.

Reed, K. (1992). History of Federal Legislation for Persons with Disabilities. The American Journal of Occupational Therapy, 46(5), 397-408.

Reeder, L.G. (1965). Employment Practices and the Cardiac. Journal of Chronic Diseases, 18, 951-963.

Reeder, L.G. & Donohue, G.A. (1958). Cardiac Employment Potential in Urban Society. Journal of Chronic Diseases, 8(2), 230-243.

Roessler, R. & Bolton, B. (1984). Vocational Rehabilitation of Individuals with Employability Skill Deficits: Problems and Recommendations. Fayetteville, AR: Arkansas Research and Training Center on Vocational Rehabilitation.

- Rothwell, W. J. (1991). HRD and the Americans with Disabilities Act. Training and Development, August, 45-47.
- Schletzer, V. M., Dawis, R.V., England, G.W. & Lofquist, L. (1961). Attitudinal Barriers to Employment (OVR Special Report Rd-422). Minneapolis, Mn.: University of Minnesota, Industrial Relations Center.
- Shaller, E. H. (1991). "Reasonable Accommodation" Under the Americans with Disabilities Act-What Does it Mean? Employee Relations Law Journal, 16(4), 431-451.
- Shaller, E. H. and Rosen, D. A. (1991-92). A Guide to the Eeoc's Final Regulations on the Americans with Disabilities Act. Employee Relations Law Journal, 17(3), 405- 430.
- Silverstein, K. (1993). Empathy Spurs Tenacity with ADA Ruling. Pension World, July,7.
- Soltis, M.J. (1994). An Ada Checklist for Implementation and Review. HR Focus, 71 (7), 19.
- Susser, P. A. (1990). The ADA: Dramatically Expanded Federal Rights for Disabled Americans. Employment Relations Law Journal, 16(21), 157-176.
- US. Department of Justice. (1996). Enforcing the ADA: A Status Report from the

Department of Justice. Civil Rights Division. Disability Rights Section. Washington, D.C.: Department of Justice.

U.S. Equal Employment Opportunity Commission & U.S. Department of Justice. (1992). Americans with Disabilities Handbook. Washington, D.C: Government Printing Office.

U.S. Equal Employment Opportunity Commission. (1996). Cumulative Ada Charge Data for the July 26, 1992 - June 30, 1996 Reporting Period. Washington, D.C.: U.S. Equal Employment Opportunity Commission, Office of Program Operations.

U.S. Equal Employment Opportunity Commission. (1996). Americans with Disabilities Act of 1990. Statistics FY 1992 through third quarter FY 1996. Washington, D.C.: U.S. Equal Employment Opportunity Commission, Office of Program Operations.

Verespej, M. A. (1994). A Pandora's Box of Ailments. Industry Week, April 18. 61-62.

Waterman, C. A. (1992). Practical Pointers for Administering the ADA. HR Magazine, May, 93-100.

West, J. (1991). The Social Policy Context of the Act". In West, J. (Ed). The Americans with Disabilities Act: From Policy to Practice. Milbank Quarterly, 61, Supplements 1 & 2, 3-21.

Williams, C.A. (1972). Is Hiring the Handicapped Good Business? Journal of Rehabilitation, 38(2), 30-34.

Wolfe, H.E. (1961). The Attitude of Small Industrial Employers Toward Hiring of Former Mental Hospital Patients. Journal of Clinical Psychology, 70 (17), 90-92.

Zadny, J. J. (1980). Employer Reactions to Job Development. Rehabilitation Counseling Bulletin, 24(2), November, 161-169.

APPENDIXES

APPENDIX A

Letter to Chamber of Commerce Membership

October 21, 1996

Dear Company President/Executive:

I am a doctoral student at Oklahoma State University preparing to conduct a research survey in order to complete my dissertation. I am planning to send a written survey to individuals who are in charge of hiring for businesses in Oklahoma regarding the employment provisions of the Americans with Disabilities Act. In most companies this is probably the personnel director or director of human resources, although in some companies this person may have a different title and other responsibilities.

In order to contact these individuals, I am asking for your assistance. I need to identify the name of the individual in charge of hiring for your company so that they can be included in the survey. I would appreciate it if you would provide this information on the enclosed postcard. A survey will then be mailed directly to the individual in charge of hiring for your company.

If you have any questions about this request, please feel free to contact me at 918-594-8372. Thank you for your assistance.

Sincerely,

Nancy Lewis

APPENDIX B

Panel of Experts

Jerry Jensen
Equal Opportunity and Affirmative Action Officer
660 Parrington Oval Suite 102
Norman, Ok. 73019-0390

Helen Kutz
Client Assistance Program
Office of Handicapped Concerns
2712 Villa Prom
Oklahoma City, Ok. 73107-2433

Candace Low
Ability Resource Center
110 S. Hartford
Tulsa, Ok. 74120

Lynn Matson
820 S. Boston Suite 500
Tulsa, Ok. 74102

Dave Strecker
Strecker and Associates
601 S. Boulder Suite 412
Tulsa, Ok 74119

Shannon Warren
Penn Well Publishing
1421 S. Sheridan
Tulsa, Ok. 74112

APPENDIX C

ADA Survey

This survey is to be completed by the individual responsible for hiring in your company or business. In many companies this individual is likely to have the title of director of personnel or director of human resources, although s/he may have another title and/or other responsibilities. If you are not the appropriate person to complete this survey, please refer it to that individual. Also, please note that the survey is printed on both sides. Your response to the complete survey is greatly appreciated.

Part I - Background Information

1. What is your gender?

Male _____

Female _____

2. How many years of formal education have you completed?

Less than 12	16 _____ bachelor's degree: major _____
12 _____	17 _____
13 _____	18 _____ master's degree: major _____
14 _____	19 _____
15 _____	20 _____ doctor's degree: major _____

3. What year were you born? _____

4. What is your racial or ethnic background?

African American _____

Hispanic _____

Asian American _____

Native American _____

Caucasian _____

Other _____

5. Have you had any of the following types of relationships with individuals with disabilities?

Yes **No**

Spouse/child/brother/sister with a disability	_____	_____
Friend or neighbor with a disability	_____	_____
Colleague or co-worker with a disability	_____	_____

Yes **No**

6. Do you have a disability

7. What type of position do you have with your company?

Human Resource/personnel director _____
Manager/executive with hiring responsibilities _____
Other (please specify) _____

8. What is the approximate total number of employees in your company/business?

(Give the number) _____

9. What is your best estimate of the number of people with disabilities that your company/business has hired in the last five years?

(Give the number) _____

10. What type of business is your company engaged in?

(1) Manufacturing _____
(2) Sales _____
(3) Service _____
(4) Other _____

11. What sources of information have been available to you regarding the employment provisions of the Americans with Disabilities Act?

Yes **No**

Official documents/manuals from the Equal Employment Opportunity Commission (EEOC)	_____	_____
--	-------	-------

- | | Yes | No |
|---|------------|-----------|
| Written materials developed by legal/human resource professionals | _____ | _____ |
| Seminars/training sessions | _____ | _____ |
| Professionals with specific expertise in the ADA | _____ | _____ |
| Other _____ | | |
12. What sources of information have been available to you regarding awareness of disabilities since the ADA was enacted?
- | | Yes | No |
|---|------------|-----------|
| Written materials developed by legal/human resource professionals | _____ | _____ |
| Seminars/training sessions | _____ | _____ |
| Professionals with specific expertise in the ADA | _____ | _____ |
| Other _____ | | |
13. Please estimate the total number of hours you have spent receiving information/training about the employment provisions of the ADA or disability awareness since the ADA was passed in 1990.
- (Number of hours) _____
14. Please estimate the number of hours that those in supervisory positions in your company/business have spent receiving information/training about the employment provisions of the ADA or disability awareness since the ADA was passed in 1990.
- (Number of hours) _____

Part II

Below are 20 cases in which an employer has made a decision related to employment practices, policies or procedures. After reading each case, please circle the number which reflects your judgement regarding action which the employer took in each case to comply with requirements of the Americans with Disabilities Act (ADA).

- 1 - Action of employer is in compliance with requirements of the ADA.
- 2 - Action of employer is not in compliance with requirements of the ADA.

- 3 - Case does not provide enough information to determine compliance or non-compliance.
 - 4 - Requirements of the ADA are not clear about the issues raised in the case.
-
1. An employee has two Borden legs as the result of a car accident. It is expected that it will take 3-4 months for them to heal. The employee must rely on family members for transportation to and from work. Because of the family members' work schedules, the employee has requested a modified work schedule. Concerned about the effect this might have on employee morale, the employer denies the request for a modified work schedule. 1 2 3 4
 2. An employee has high blood pressure and holds a position which is physically demanding and stressful. Fearing the possibility that the employee might have a heart attack, the employer reassigns the employee to a position which is less demanding and less stressful. 1 2 3 4
 3. An application for a position which requires contact with the public has a prominent facial scar. Although the applicant is qualified for the position, the employer believes that customers will have a negative reaction to the scar which would adversely effect company sales. The employer eliminates the applicant from consideration based on concerns about the effect of the scar. 1 2 3 4
 4. An applicant who is blind applies for a position which calls for an occasional business trip. The applicant indicates that she will need a travel attendant for those trips. The employer believes this is a reasonable accommodation which would not cause an undue hardship to his business. 1 2 3 4
 5. A company has contracted with a training and development consultant to provide customer service training for its employees. An employee of the company who uses a wheelchair checks on the accessibility of the facility where the training will be held and learns that it is not wheelchair-accessible. The employee notifies his supervisor of the problem who tells him that he does not have to attend the training session. 1 2 3 4

- | | | | | | |
|-----|---|---|---|---|---|
| 6. | An individual with a neuromuscular impairment applies for a position and requests a job description including the essential functions. The applicant possesses all the skills for the job except for typing. In the interview process the employer states that while typing is rarely done, they still would like to have someone who is able to type, if the need arose. Another applicant is hired for the position. | 1 | 2 | 3 | 4 |
| 7. | An employee has an impairment which causes decreased energy later in the work day. An essential function of the position which requires physical movement is currently conducted in the early afternoon. The employee requests that she be allowed to fulfill the function earlier in the day. However the employer, feeling this would disrupt the work flow in the office, denies the employee's request. | 1 | 2 | 3 | 4 |
| 8. | An employee has developed a neurological impairment and can not perform the essential duties of the job which he holds. There are no equivalent positions for which he is qualified so the employer offers the employee a lower-graded position. | 1 | 2 | 3 | 4 |
| 9. | An individual who has no arms is an applicant for a position for which she is qualified. She has her own computer with adaptive equipment which allows her to perform her work. The employer is concerned that he might have to replace the computer or provide other equipment that she might need in the future. Concerned that this costs could be very high, the employer decides to remove the individual from consideration for the position. | 1 | 2 | 3 | 4 |
| 10. | An applicant for a position with a law firm has a history of a disabling mental illness which she makes known in the interview process. Although the individual is qualified, the employer is concerned that the stress involved in trying to make partner may trigger a relapse of the mental illness. The employer removes the applicant from consideration for this position. | 1 | 2 | 3 | 4 |

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| 11. An employer has several employees with disabilities which require accommodation. The employer also anticipates the possibility of hiring additional employees with disabilities and the need to rearrange work areas in order to make accommodations. The employer decides to designate a specific work area to remodel where all of the employees with disabilities would be assigned. | 1 2 3 4 |
| 12. An applicant discloses during the course of the interview process that her spouse has a disability. The employer is concerned that the applicant will have to miss work and/or leave work frequently to care for her spouse. In addition, the employer is concerned that he would have to allow for a modified work schedule if the applicant requested it. The employer removes the applicant from consideration for the position. | 1 2 3 4 |
| 13. An employee with a back impairment has a job which requires him to move large items from place to place within the company facility. Although he has used a dolly to move the items, which has been an acceptable accommodation, the employee has requested an automated lifting device. The employer denies the request to acquire the lifting device. | 1 2 3 4 |
| 14. A new employee informs her employer after she is hired that she will need a specific type of office furniture because of a psycho-motor learning disability. The employer requests documentation of the disability before she can agree to purchase the specified furniture. | 1 2 3 4 |
| 15. An applicant with a visual impairment requests more time to take a required written examination as he uses a magnifying glass in order to read which slows down his reading time. The purpose of the test is to measure knowledge which is job-related not to measure reading speed. The employer denies this request stating that part of determining that applicants are qualified is measuring their ability to complete the exam in the required amount of time. | 1 2 3 4 |

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| 16. | An employee becomes a paraplegic as a result of an accident and wants to return to work. The employer has checked on the availability of adaptive equipment which could make it possible for the employee to return to work in the same position. After checking the cost, the employer feels the costs are too high and, therefore, would create an undue hardship on the business. The employer looks for another position within the company for the employee. | 1 | 2 | 3 | 4 |
| 17. | An employer interviews two applicants for a position, one of whom is hearing impaired. The employer decides that, while it is not essential to the job, it would be helpful if an employee could answer the phone. The employer hires the non-hearing impaired applicant for this reason. | 1 | 2 | 3 | 4 |
| 18. | An employee has a disability which inhibits his ability to write. A significant part of the employee's job is to maintain records which the employee has done manually. The employee indicates that he is able to use a computer and could continue to maintain the records through use of a computer. The employer acquires a computer for the use of this employee. | 1 | 2 | 3 | 4 |
| 19. | An employee has come to work numerous times under the influence of alcohol. Each time the employee's supervisor confronts the employee, who responds that he has tried to stop drinking but that he is addicted. Although the employer wants to terminate the employee, he does not because alcoholism is a disability under the ADA. | 1 | 2 | 3 | 4 |
| 20. | An applicant for a position which requires passing a state licensing exam has a severe visual impairment. The individual is not able to take the exam because she needs a special type of device to assist her. She requests that the employer provide the device so that she can take the exam and therefore be qualified for the position. The employer denies her request. | 1 | 2 | 3 | 4 |

APPENDIX D

Cover Letter for Survey

Dear (Name):

Several weeks ago your company submitted your name as the appropriate person to complete the following survey. This survey is the basis for research I am conducting for completion of a doctoral degree at Oklahoma State University. The topic of this research is the employment provisions of the Americans with Disabilities Act.

The survey contains two parts. The first part is background information about you and your company. The second part consists of 22 case scenarios each of which describes situations in which an employer has made a judgement about application of the ADA. The scenarios are intended to apply a general application of the law. It is not expected that you are familiar with court rulings or the application of the law in all circumstances.

The results of the survey are for academic purposes only. No identification will be made of companies or individuals in reporting the results. Tracking of responses is only for the purpose of achieving enough completed surveys to complete the study.

I realize this is an imposition on your time and thank you in advance for your willingness to complete the survey. If you have any questions about the survey or its uses, please contact me at 918-594-8372; my advisor at OSU, Dr. Mike Hirlinger, 405-744-5574; or Ms. B. Gay Clarkson, Institutional Review Board Executive Secretary, Oklahoma State University, 305 Whitehurst Hall, Stillwater, OK 74078, 405-744-5700.

Sincerely,

Nancy Lewis

APPENDIX E

**OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
HUMAN SUBJECTS REVIEW**

Date: 12-31-96

IRB#: ED-97-052

Proposal Title: ASSESSING EMPLOYERS UNDERSTANDING OF THE
AMERICANS WITH DISABILITIES ACT

Principal Investigator(s): Michael Hirlinger, Martin Burlingame, Nancy Lewis

Reviewed and Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

ALL APPROVALS MAY BE SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD
AT NEXT MEETING, AS WELL AS ARE SUBJECT TO MONITORING AT ANY TIME DURING
THE APPROVAL PERIOD.

APPROVAL STATUS PERIOD VALID FOR ONE CALENDAR YEAR AFTER WHICH A
CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR BOARD
APPROVAL.

ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR
APPROVAL.

Comments, Modifications/Conditions for Approval or Reasons for Deferral or Disapproval
are as follows:

Signature:


Chair of Institutional Review Board

cc: Nancy Lewis

Date: January 8, 1997

VITA

Nancy Virtue Lewis

Candidate for the Degree of

Doctor of Education

Thesis: ASSESSING EMPLOYERS' UNDERSTANDING OF THE EMPLOYMENT
PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT

Major: Higher Education

Biographical:

Education: Graduated from Harding High School in Oklahoma City in May, 1968; received Bachelor of Arts degree in Political Science from The Colorado College in May 1972; received Master of Arts in Teaching from Oklahoma City University in May, 1976. Completed the requirements for the Doctor of Education degree at Oklahoma State University in July 1997.

Experience: Taught secondary school for six years; worked on state education policy and in state government for ten years; employed by the University of Oklahoma as an administrator, 1995 to present.